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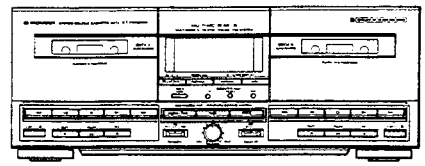
Service Manual



ORDER NO.
ARP 1919

STEREO DOUBLE CASSETTE TAPE DECK

CT-Z560WR
CT-Z460WR
CT-Z360WR

MODELS CT-Z560WR, CT-Z460WR AND CT-Z360WR HAVE FOLLOWING VERSION:

Type	Applicable model			Power requirement	Export destination
	CT-Z560WR	CT-Z460WR	CT-Z360WR		
ZEBM	○	○	○	(DC power supply)	Australia, European continent and West Germany

- This manual is applicable to the CT-Z560WR/ZEBM, CT-Z460WR/ZEBM AND CT-Z360WR/ZEBM Types.
- The CT-Z560WR, CT-Z460WR and CT-Z360WR can not operated, unless they are connected with A-Z560, A-Z460 and A-Z360, which respectively compose the system.
- As to the system composition and operating instructions, refer to page 5.
- Ce manual pour le service comprend les explications de réglage en français.
- Este manual de servicio trata del método ajuste escrito en español.

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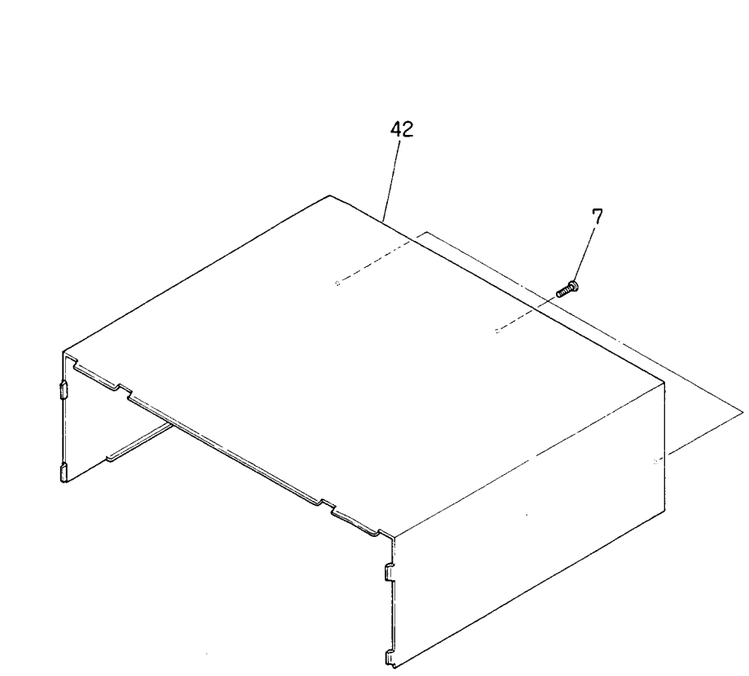
1. EXPLODED VIEWS AND PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

1.1 Exterior and Packing

Mark	No.	Description	Parts No.
	1.	Name plate	
	2.	Foot ass'ys	
	3.	Caution card ("NOTE")	ARH1047
	4.	-------	
	5.	Door panel (L) Ass'y	RXX1257
	6.	Screw	BBZ26P060FMC
	7.	Screw	BBZ30P060FCC
	8.	-------	
	9.	Screw	BBZ30P080FZK
	10.	-------	
	11.	Screw	BBZ30P120FZK
	12.	Screw	IBZ30P150FCU
	13.	PCB Spacer	
	14.	Knob (MODE)	RAC1380
	15.	Knob (EJECT L)	RAC1463
	16.	Knob (EJECT R)	RAC1464
	17.	Knob (PLAY)	RAC1465
	18.	Knob (REC)	RAC1466
	19.	Knob (COPY)	RAC1467
	20.	Knob (SLIDE)	RAC1469
	21.	Knob (VR)	RAC1470
	22.	Filter (FL)	RAH1512
	23.	Door panel (L)	
	24.	Door Panel (R)	RAH1579
	25.	Front Panel	RAH1674
	26.	Spring (Door L)	RBH1203
	27.	Spring (Door R)	RBH1204
	28.	Spring	RBK1004
	29.	Binder	REC-371
	30.	Spacer (PVC)	
	31.	Damper ass'y	REC1013
	32.	Indicating panel	REE-113
	33.	Pad (F)	RHA1036
	34.	Pad (R)	RHA1037
	35.	Polystylene cover	RHC1002
	36.	Packing case	RHG1157
	37.	Connector ass'y 5P	RKP1323
	38.	Arm color	
	39.	Door lens (L)	RLP1030
	40.	Door lens (R)	RLP1031
	41.	FL Lens	RLP1033
	42.	Bonnet	RXX1225
	43.	Rear panel	
	44.	Main shassis	
	45.	Mechanism mount plate	
	46.	Eject arm (L)	
	47.	Eject arm (R)	
	48.	Mechanism shield plate	
	49.	Cord clamper	RNH-184
	50.	Door pocket	RNT1008
	51.	-------	
	52.	Foot	
	53.	Cushion	
	54.	Foot ass'y	RXA1276
	55.	Knob ass'y (ASES)	RXA1325
	56.	Mechanism unit(Deck I)	
	57.	Mechanism unit (Deck II)	
	58.	Screw	BCZ26P050FMC
	59.	Connector ass'y 15P	RKP1313
	60.	-------	
	61.	HX Ass'y	
	62.	-------	
	63.	-------	
	64.	-------	
	65.	-------	
	66.	VR Ass'y	
	67.	Transistor A Ass'y	
	68.	Transistor B Ass'y	
	69.	Main Ass'y	
	70.	-------	
	71.	Operation 1 Ass'y	
	72.	Operation 2 Ass'y	
	73.	Display Ass'y	
	74.	Connection Ass'y	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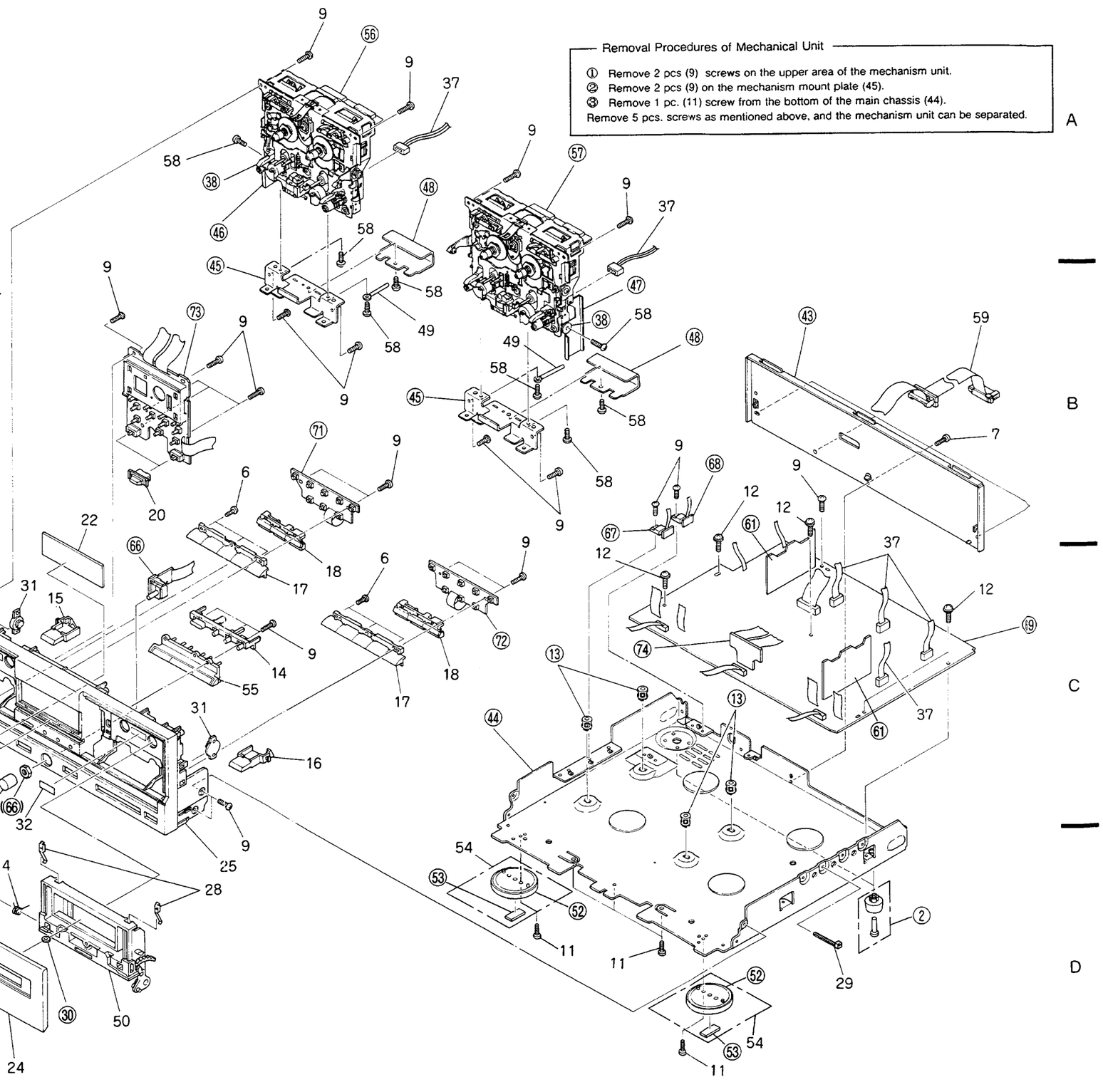
Removal Procedures of Mechanical Unit
① Remove 2 pcs (9) screws on the upper area of the mechanism unit.
② Remove 2 pcs (9) on the mechanism mount plate (45).
③ Remove 1 pc. (11) screw from the bottom of the main chassis (44).
Remove 5 pcs. screws as mentioned above, and the mechanism unit can be separated.
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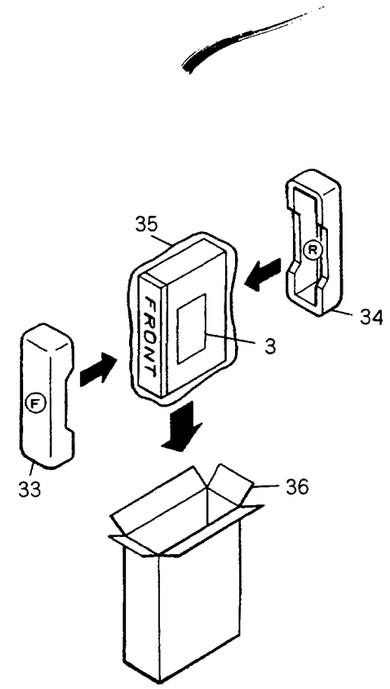


Note: As to the system composition and operating instructions, refer to following service manuals.

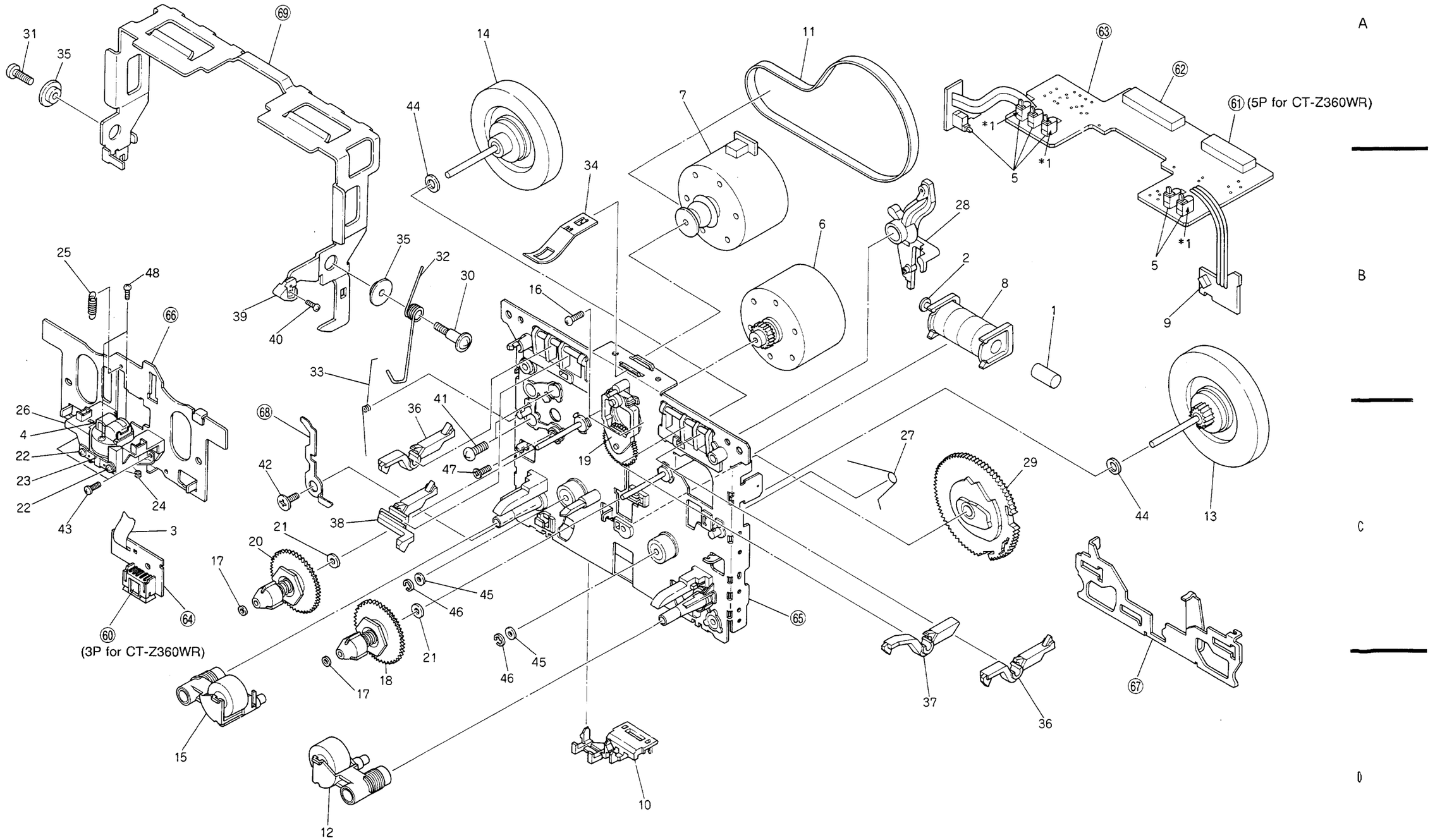
Model	Applicable model	
	System name	Manual order number
CT-Z560WR	S-999D	ARP1929
CT-Z460WR	S-777D	ARP1930
CT-Z360WR	S-555D	

1.2 Mechanism Unit (Deck I)

Mark	No.	Description	Parts No.
	1.	CORE	RLA1130
	2.	PLUNGER	RLA1132
	3.	HD FPC (R/P)	RNP1232
	4.	HEAD R/P E	RPB1030
	5.	PUSH SWITCH	RSG1018
	6.	REEL MOTOR BLK	RXM1029
	7.	MAIN MOTOR BLK	RXM1030
	8.	SOLENOIDE BLK	RXP1010
	9.	PHOTO-TRANSISTOR	SPI33534FG
	10.	LEAD HOLDER	RNK1530
	11.	MAIN BELT	REB1112
	12.	PINCH ROLLER ASS'Y	RXA1183
	13.	F/W ASS'Y	RXA1294
	14.	F/W ASS'Y	RXA1295
	15.	PINCH ROLLER ASS'Y (L)	RXA1296
	16.	SCREW 2.6×6.4 (ZN)	RBA1076
	17.	WASHER (PLASTIC)	RBF-057
	18.	BASE REEL BLK	RXA1184
	19.	IDLER BLK	RXA1248
	20.	BASE REEL BLK	RXC-040
	21.	POLISLIDER WASHER	WA21D070D013
	22.	AZIMUTH SCREW	RBA1080
	23.	AZIMUTH SPRING	RBK1029
	24.	SPRING	RBL-085
	25.	SPRING	RBL1003
	26.	HOUSING HD BLK	RXA1293
	27.	SLIDE SPRING	RBH1239
	28.	PLAY ARM	RNK1525
	29.	CAM GEAR (3R)	RNK1526
	30.	SCREW	RBA1078

Mark	No.	Description	Parts No.
	31.	SCREW 2.6×5(ZN)	RBA1079
	32.	SPRING (R)	RBH1233
	33.	SPRING (L)	RBH1234
	34.	SPRING	RBK1030
	35.	COLLAR	RLA1133
	36.	REC DETECTOR LEVER	RNK1527
	37.	PACK DETECTOR LEVER	RNK1528
	38.	METAL DETECTOR LEVER (L)	RNK1529
	39.	HOOK	RNM-160
	40.	SCREW	PCZ20P040FMC
	41.	SCREW	PMZ26P050FMC
	42.	SCREW	RBA1048
	43.	SCREW TT 2.0×5(ZN)	RBA1077
	44.	POLISLIDER WASHER	WA26D045D025
	45.	WASHER	WA26D047D050
	46.	E RING	YE15FUC
	47.	SCREW	PBZ30P080FMC
	48.	SCREW	PMZ14P050FNI
	60.	CONNECTOR (5P)	
	61.	CONNECTOR (8P)	
	62.	CONNECTOR (10P)	
	63.	CONNECTION PCB	
	64.	HEAD PCB R/P	
	65.	CHASSIS BASE BLK	
	66.	HEAD BASE	
	67.	SLIDE PLATE	
	68.	ARM (L)	
	69.	EJECT LEVER (R)	

Note: Switches with mark *1 are not on the CT-Z360WR.



IC BLOCK DIAGRAM

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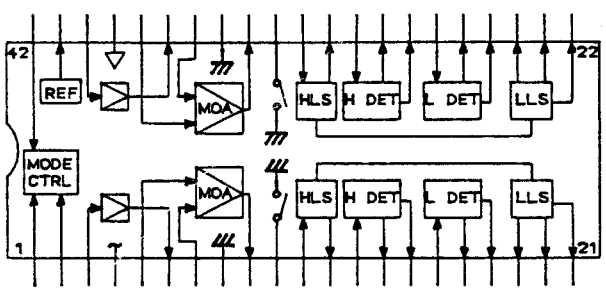

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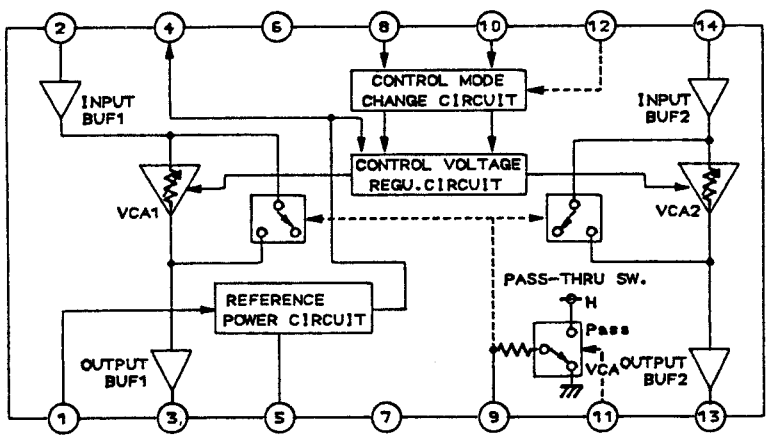

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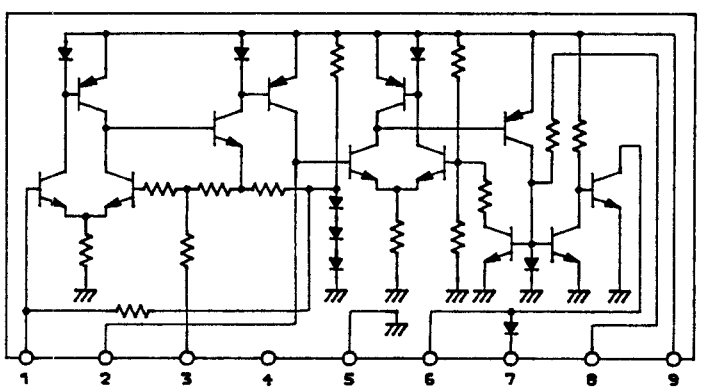

1.3 Mechanism Unit (Deck II)

Mark	No.	Description	Parts No.
	1.	CORE	RLA1130
	2.	PLUNGER	RLA1132
	3.	HD FPC (R/P)	RNP1232
	4.	HEAD R/P E	RPB1030
	5.	PUSH SWITCH	RSG1018
	6.	REEL MOTOR BLK	RXM1029
	7.	MAIN MOTOR BLK	RXM1030
	8.	SOLENOIDE BLK	RXP1010
	9.	PHOTO-TRANSISTOR	SPI33534FG
	10.	LEAD HOLDER	RNK1530
	11.	MAIN BELT	REB1112
	12.	PINCH ROLLER ASS'Y	RXA1183
	13.	F/W ASS'Y	RXA1294
	14.	F/W ASS'Y	RXA1295
	15.	PINCH ROLLER ASS'Y (L)	RXA1296
	16.	SCREW 2.6×6.4 (ZN)	RBA1076
	17.	WASHER (PLASTIC)	RBF-057
	18.	BASE REEL BLK	RXA1184
	19.	IDLER BLK	RXA1248
	20.	BASE REEL BLK	RXC-040
	21.	POLISLIDER WASHER	WA21D070D013
	22.	AZIMUTH SCREW	RBA1080
	23.	AZIMUTH SPRING	RBK1029
	24.	SPRING	RBL-085
	25.	SPRING	RBL1003
	26.	HOUSING HD BLK	RXA1293
	27.	SLIDE SPRING	RBH1239
	28.	PLAY ARM	RNK1525
	29.	CAM GEAR (3R)	RNK1526
	30.	SCREW	RBA1078
	31.	SCREW 2.6×5(ZN)	RBA1079
	32.	SPRING (R)	RBH1230
	33.	SPRING (L)	RBH1231
	34.	SPRING	RBK1030
	35.	COLLAR	RLA1133
	36.	REC DETECTOR LEVER	RNK1527
	37.	PACK DETECTOR LEVER	RNK1528
	38.	METAL DETECTOR LEVER (L)	RNK1529
	39.	HOOK	RNM-160
	40.	SCREW	PCZ20P040FMC
	41.	SCREW	PMZ26P050FMC
	42.	SCREW	RBA1048
	43.	SCREW TT 2.0×5(ZN)	RBA1077
	44.	POLISLIDER WASHER	WA26D045D025
	45.	WASHER	WA26D047D050
	46.	E RING	YE15FUC
	47.	SCREW	PBZ30P080FMC
	48.	SCREW	PMZ14P050FNI
	60.	CONNECTOR (5P)	
	61.	CONNECTOR (8P)	
	62.	CONNECTOR (10P)	
	63.	CONNECTION PCB	
	64.	HEAD PCB R/P	
	65.	CHASSIS BASE BLK	
	66.	HEAD BASE	
	67.	SLIDE PLATE	
	68.	ARM (R)	
	69.	EJECT LEVER (L)	

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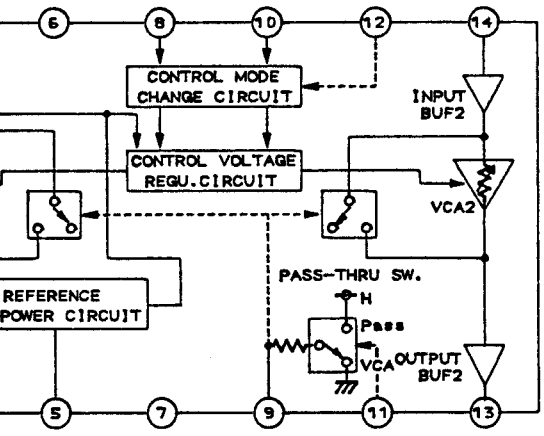

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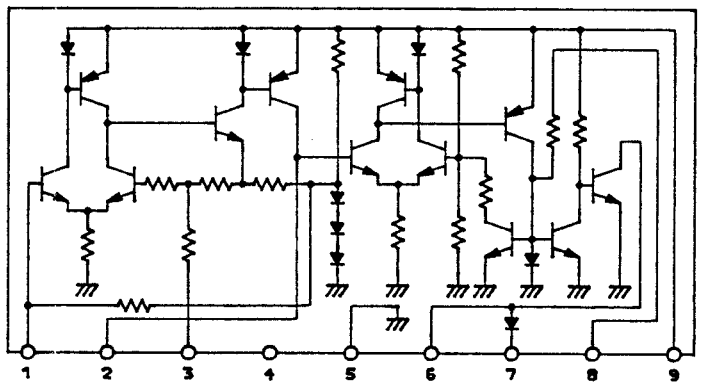

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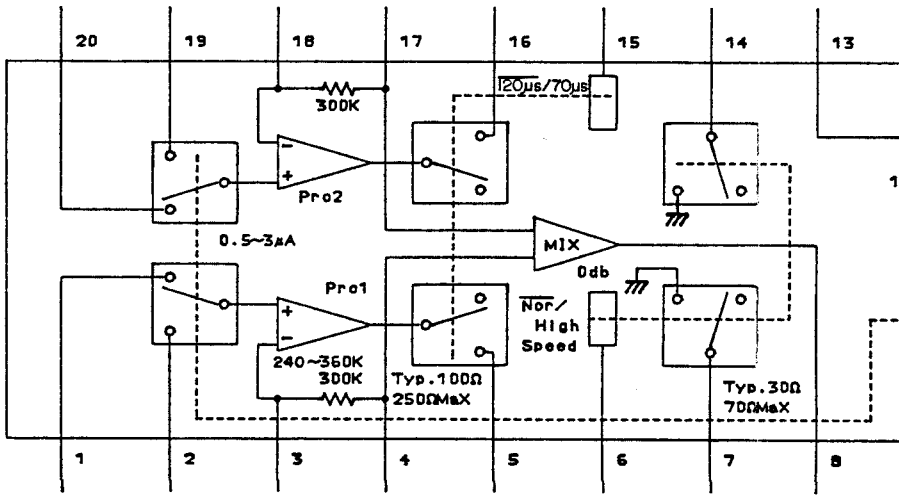
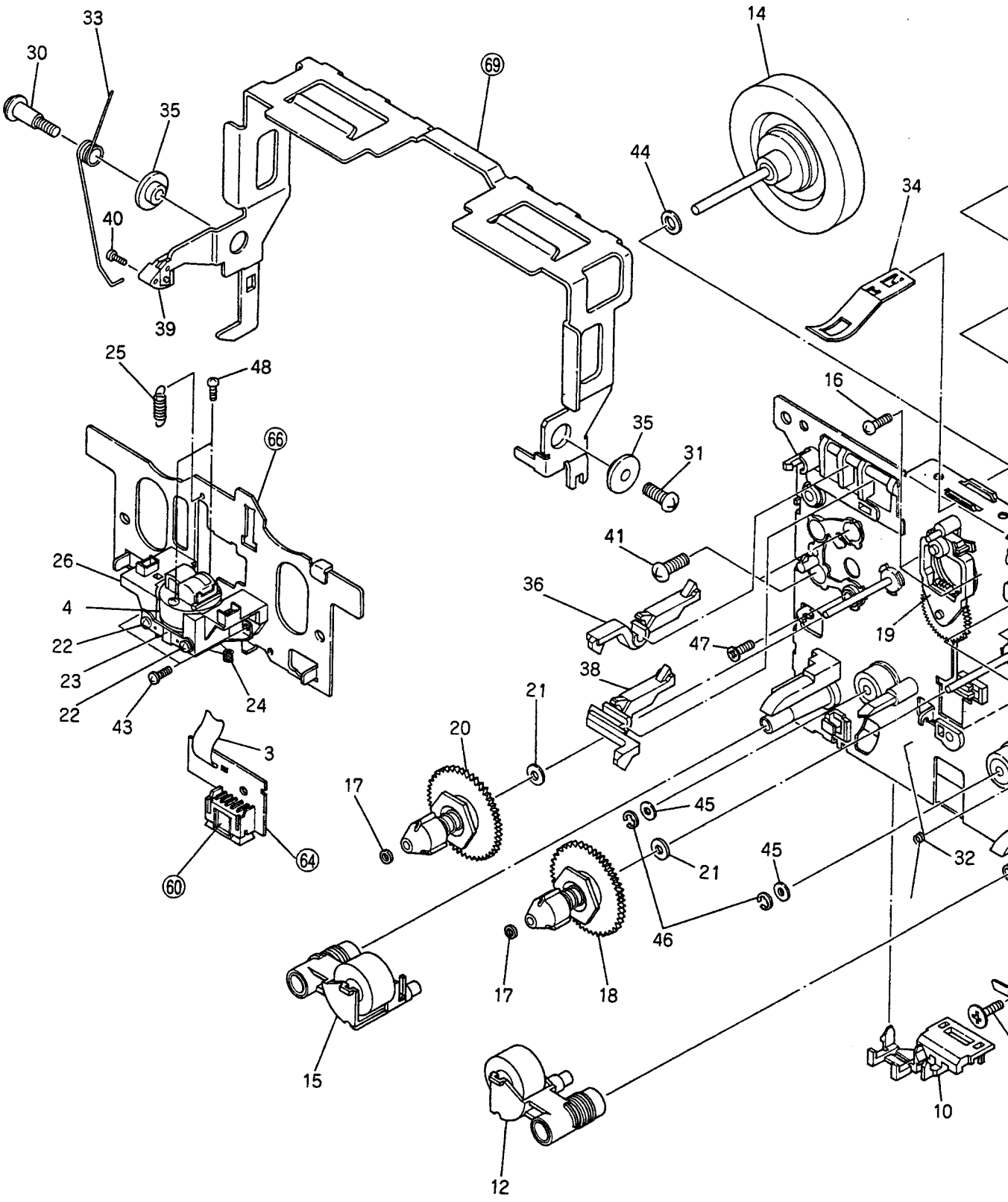


ark	No.	Description	Parts No.
	31.	SCREW 2.6×5(ZN)	RBA1079
	32.	SPRING (R)	RBH1230
	33.	SPRING (L)	RBH1231
	34.	SPRING	RBK1030
	35.	COLLAR	RLA1133
	36.	REC DETECTOR LEVER	RNK1527
	37.	PACK DETECTOR LEVER	RNK1528
	38.	METAL DETECTOR LEVER (L)	RNK1529
	39.	HOOK	RNM-160
	40.	SCREW	PCZ20P040FMC
	41.	SCREW	PMZ26P050FMC
	42.	SCREW	RBA1048
	43.	SCREW TT 2.0×5(ZN)	RBA1077
	44.	POLISLIDER WASHER	WA26D045D025
	45.	WASHER	WA26D047D050
	46.	E RING	YE15FUC
	47.	SCREW	PBZ30P080FMC
	48.	SCREW	PMZ14P050FNI
	60.	CONNECTOR (5P)	
	61.	CONNECTOR (8P)	
	62.	CONNECTOR (10P)	
	63.	CONNECTION PCB	
	64.	HEAD PCB R/P	
	65.	CHASSIS BASE BLK	
	66.	HEAD BASE	
	67.	SLIDE PLATE	
	68.	ARM (R)	
	69.	EJECT LEVER (L)	



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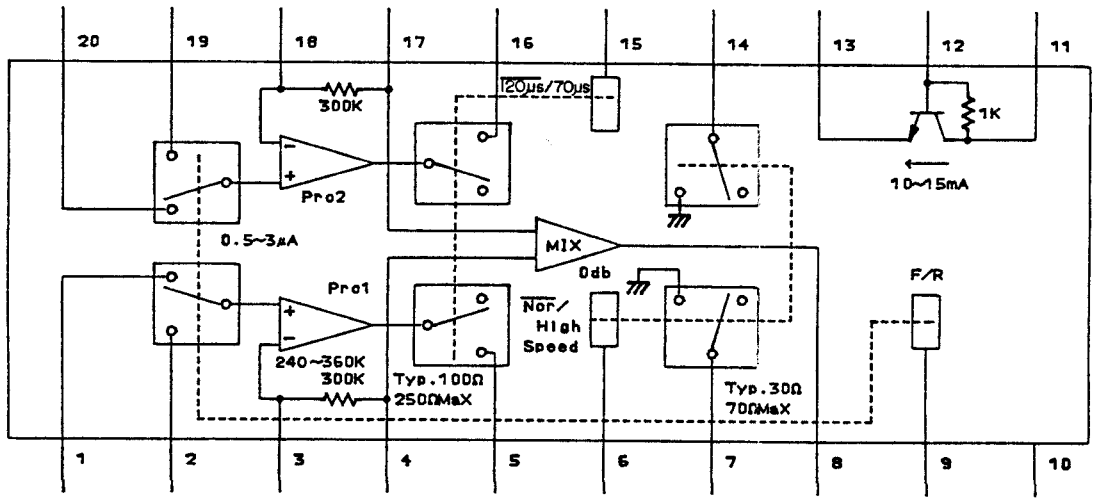

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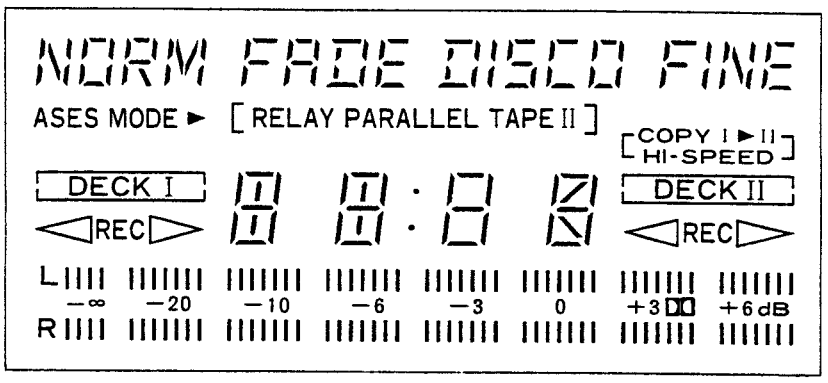

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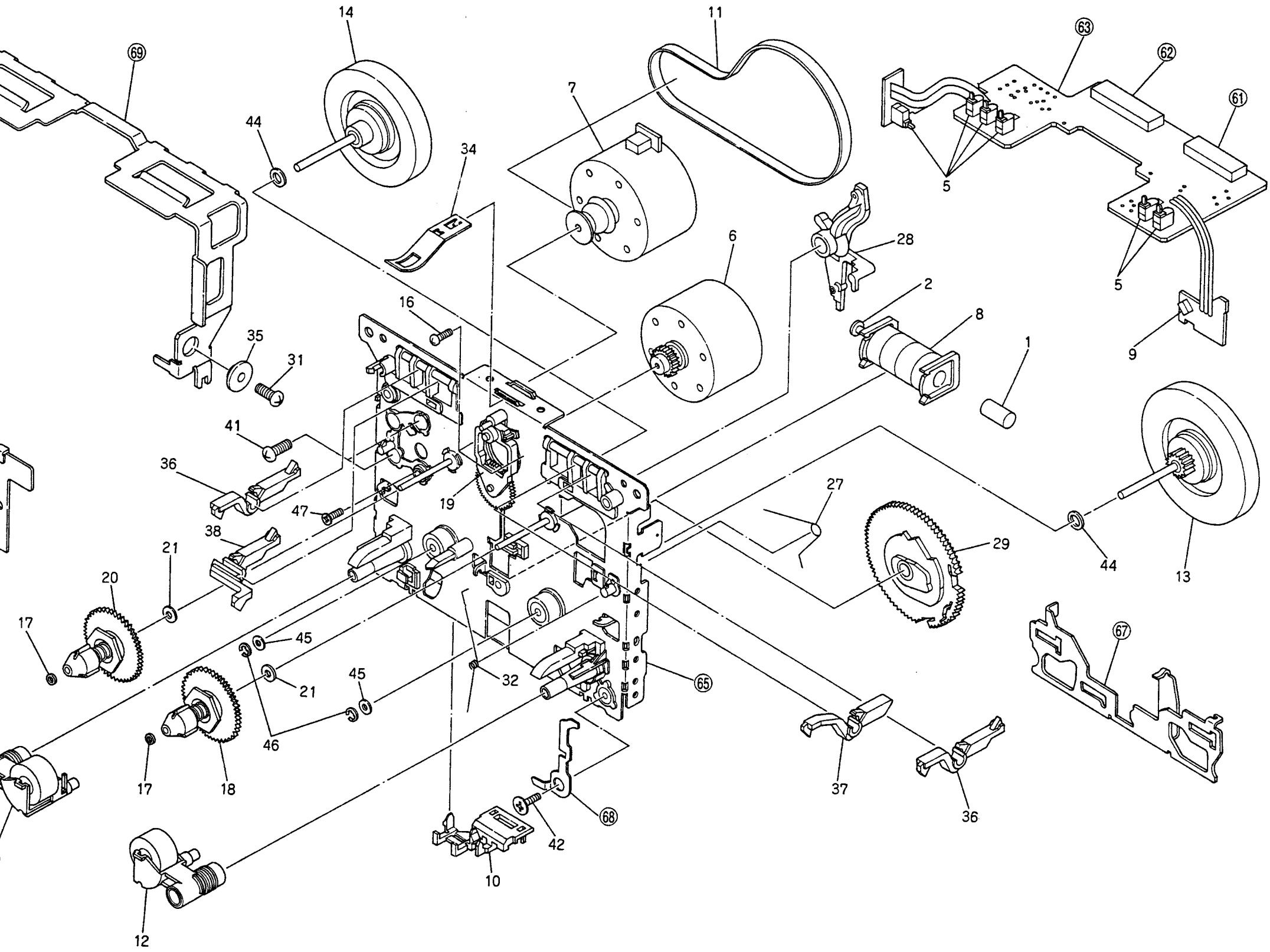


2. SCHEMATIC DIAGRAM

1. RESISTORS :
Indicated in Ω, 1/4W, 1/6W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10%, (M) : ±20% tolerance.

2. CAPACITORS :
Indicated in capacity (μF) /voltage (V) unless otherwise noted p : pF.Indication without voltage is 50V except electolytic capacitor.

3. VOLTAGE CURRENT :
DC voltage (V) at no input signal.

4. OTHERS
PLAYBACK SIGNAL ROUTE
RECORDING SIGNAL ROUTE
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
✱ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

◀ : Test point

5. SWITHES (Underline indicates switch position.)

DISPLAY UNIT

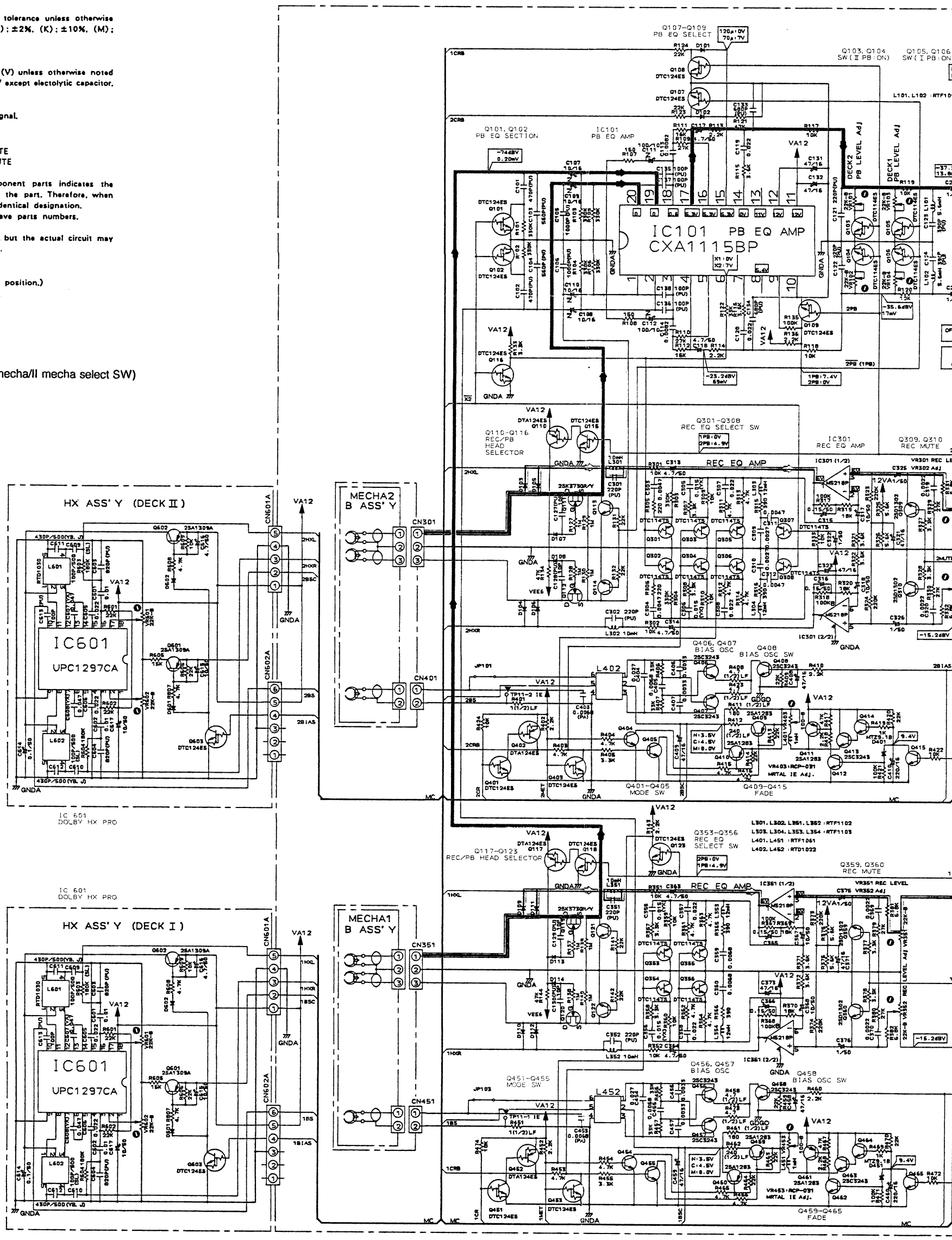
S1501:	X1 COPY
S1502:	X2 COPY
S1503:	PARALLEL
S1504:	RELAY/SKIP
S1505:	RESET
S1506:	1/2 (Counter I mecha/II mecha select SW)
S1507:	TIME
S1508:	MODE
S1509:	NORM (FINE)
S1510:	FADE
S1511:	DISCO
S1512:	REVERSE MODE
S1513:	DOLBY MODE

OPERATE1 UNIT

S1301:	FWD ▷
S1302:	REV ◁
S1303:	STOP □
S1304:	REC ●
S1305:	FF ▶▶
S1306:	REW ◀◀
S1307:	PAUSE □□
S1308:	MUTE ⊙

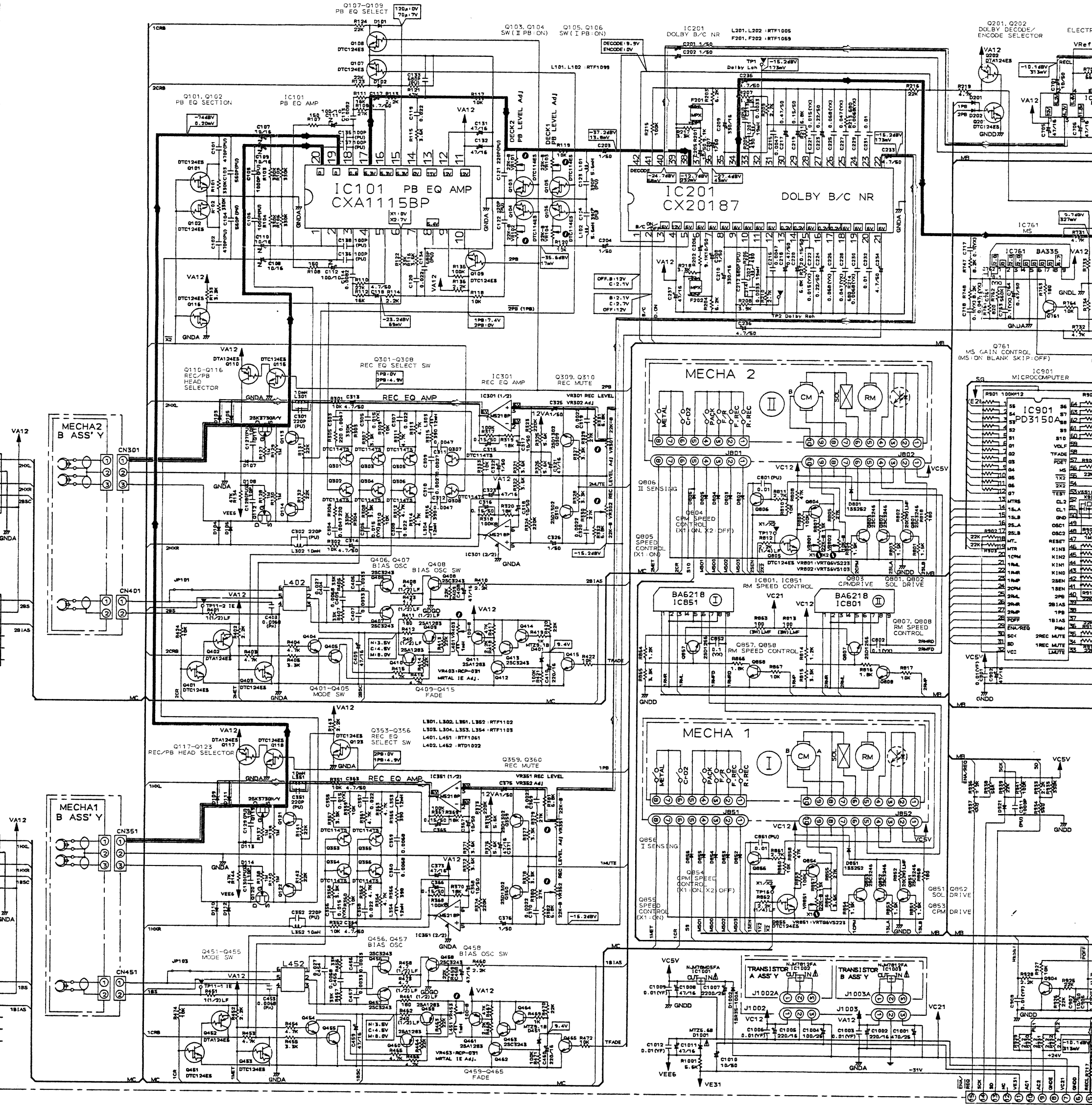
OPERATE2 UNIT

S1401:	FWD ▷
S1402:	REV ◁
S1403:	STOP □
S1404:	REC ●
S1405:	FF ▶▶
S1406:	REW ◀◀
S1407:	PAUSE □□
S1408:	MUTE ⊙



NOTE: If the parts are not identified in the diagr
are used.

NPN 2SC3311A
PNP 2SA1309A
1SS254
VRTB6VS



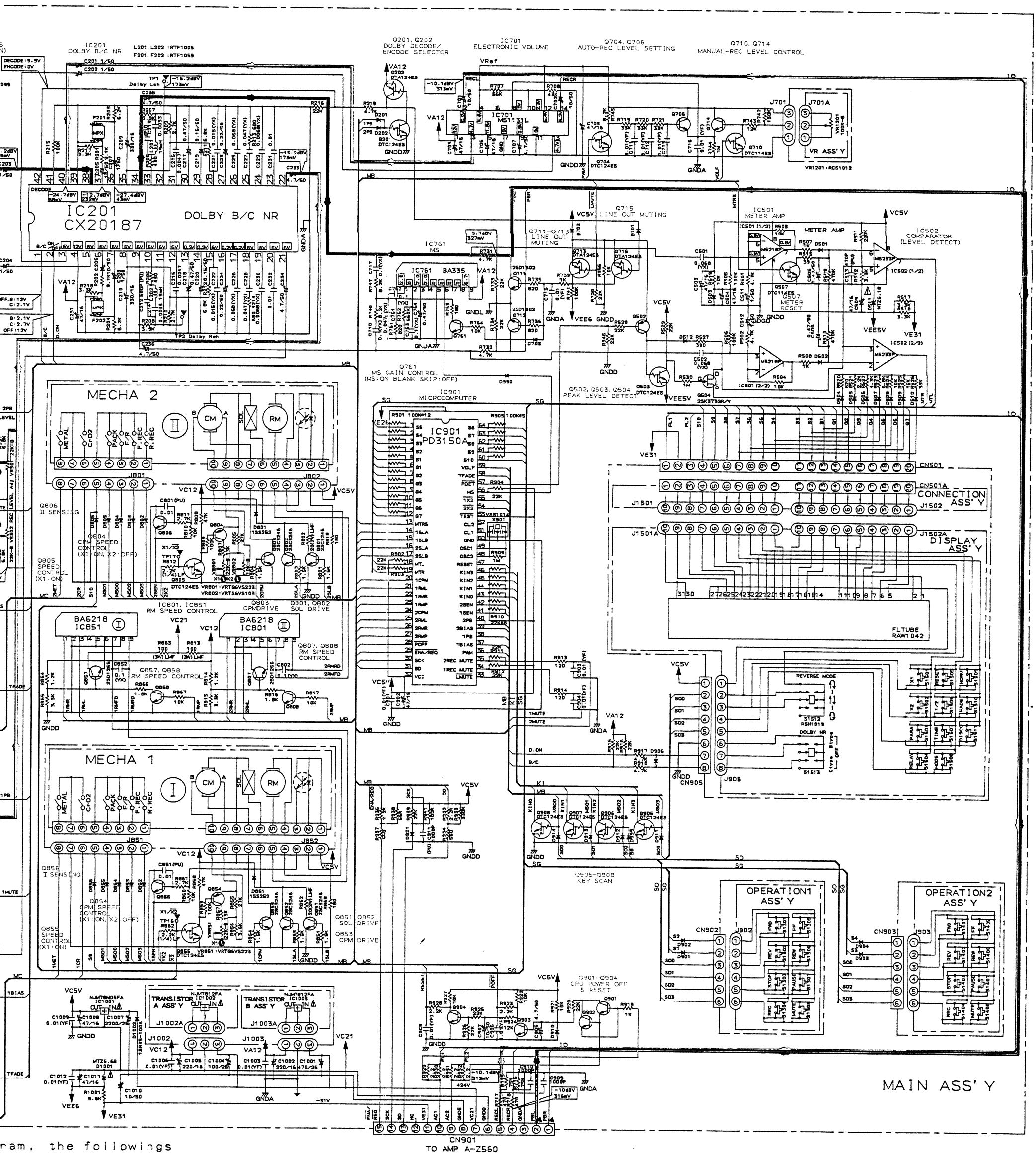
NOTE: If the parts are not identified in the diagram, the followings are used.

NPN 2SC3311A

PNP 2SA1309A

1SS254

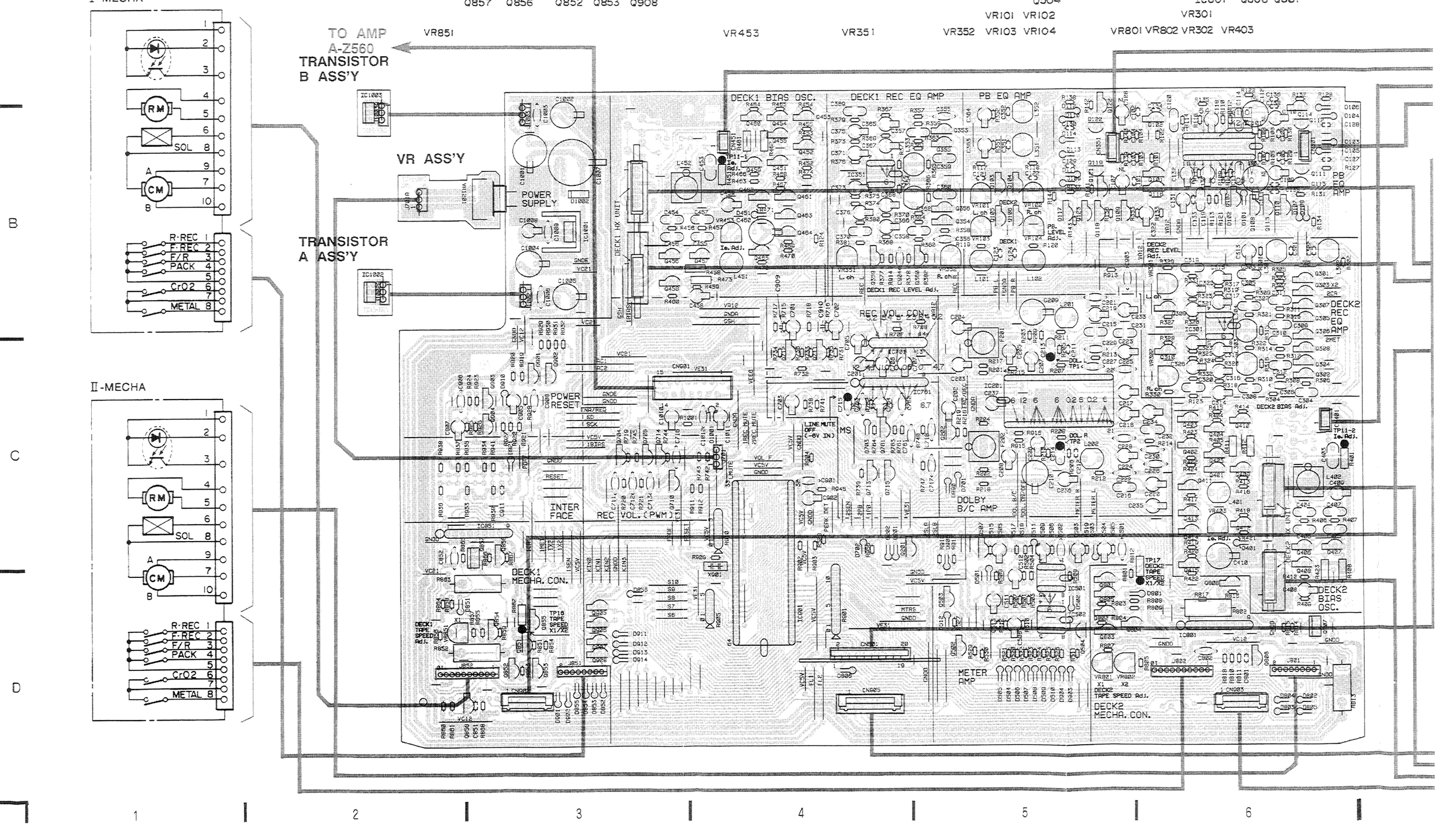
VRTB6VS



ram, the followings

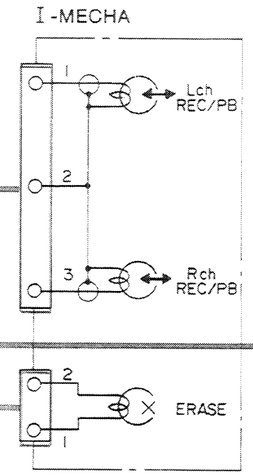
3. P.C. BOARDS CONNECTION DIAGRAM

- View from component side

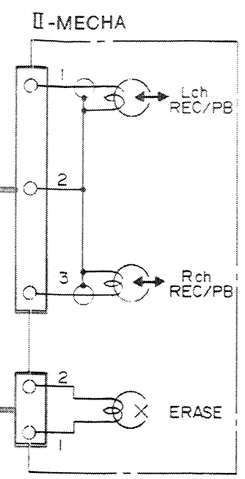

1 2 3 4 5 6
IC1003 IC1002 Q901 Q904 IC1001 Q905 IC851 Q903 Q902 Q906 Q858 Q851 Q854 Q855 Q907 Q857 Q856 Q852 Q853 Q908
Q457 Q456 Q458 Q460 Q454 Q453 Q459 Q455 Q452 Q462 Q451 Q461 Q463 Q465 Q464 Q704 Q706 Q714 Q710 IC901 Q712 Q711
IC351 Q359 Q360 IC701 Q355 Q353 IC761 Q356 Q761 Q354 Q202 Q713 Q715 Q201 Q503 Q502 Q504 VR101 VR102 VR103 VR104
Q103 Q104 Q105 Q106 IC201 Q507 IC501 IC502 Q117 Q123 Q125 Q120 Q121 Q801 Q805 Q802 Q804 Q803 VR453 VR351 VR352
IC101 Q114 Q110 Q112 Q122 Q119 Q102 Q118 Q109 Q101 Q116 Q402 Q403 Q404 Q410 Q411 Q401 Q309 Q413 Q409 Q405 Q414 Q412 Q310 Q415 Q808 IC801 Q806 Q807 VR301 VR801 VR802 VR302 VR403
Q107 Q108 Q115 Q111 Q303 Q301 Q113 Q306 Q305 Q307 Q302 Q304 Q308 Q408 Q406 Q407
A
I-MECHA
1 2 3 4 RM 5 6 SOL 8 9 A 7 CM 10 B
R·REC 1 F·REC 2 F/R 3 PACK 4 5 CrO2 6 7 METAL 8
B
II-MECHA
1 2 3 4 RM 5 6 SOL 8 9 A 7 CM 10 B
R·REC 1 F·REC 2 F/R 3 PACK 4 5 CrO2 6 7 METAL 8
C
D
TO AMP A-Z560
TRANSISTOR B ASS'Y
VR ASS'Y
TRANSISTOR A ASS'Y
VR851
DECK1 BIAS OSC.
DECK1 REC EQ AMP
PB EQ AMP
POWER SUPPLY
DECK1 HX UNIT
REC VOL. CON
POWER RESET
INTER FACE
REC VOL. (PWM)
DECK1 MECHA. CON.
DOLBY B/C AMP
METER AMP
DECK2 REC EQ AMP
DECK2 BIAS OSC.
DECK2 MECHA. CON.
DECK1 REC LEVEL Adj.
DECK2 REC LEVEL Adj.
PB LEVEL Adj.
DECK1 TAPE SPEED Adj.
DECK2 TAPE SPEED Adj.
DECK2 BIAS Adj.
LINE MUTE OFF (-6V IN)
1 2 3 4 5 6

IC101 Q114
Q110 Q112
Q107 Q108 Q115 Q111
Q303 Q301 Q113
Q306 Q305 Q307
Q302 Q304 Q308
Q408 Q406 Q407
Q806 Q807

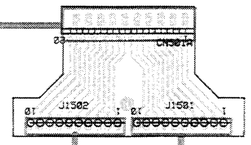
I-MECHA



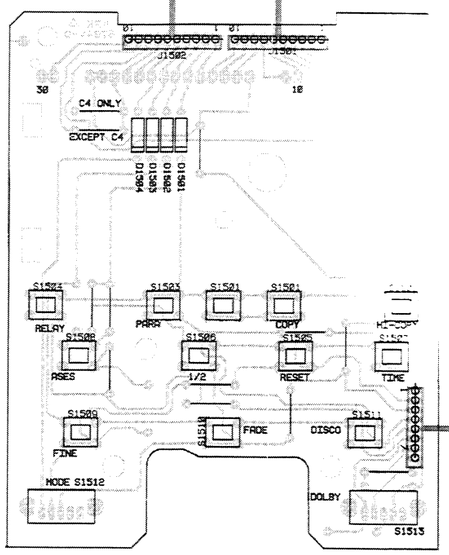
II-MECHA



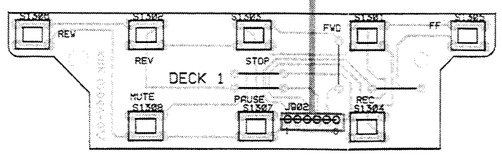
CONNECTION ASS'Y



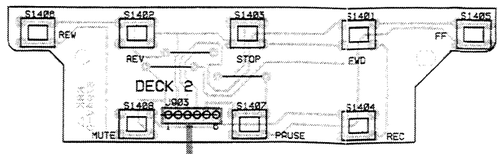
DISPLAY ASS'Y



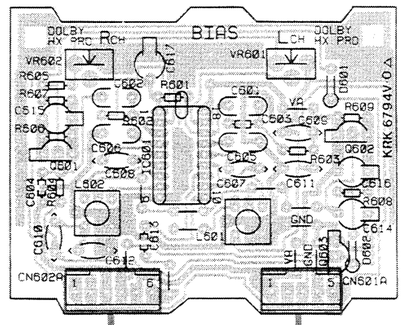
OPERATION 1 ASS'Y

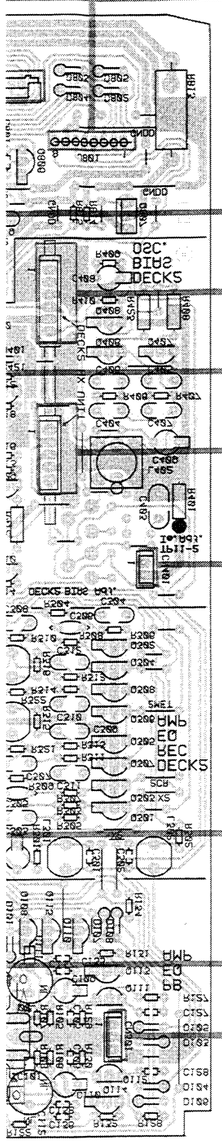


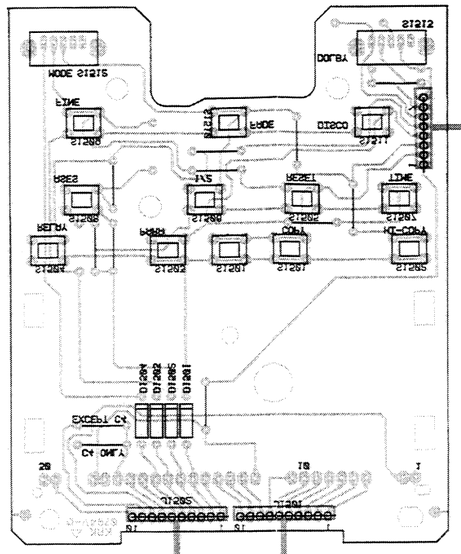
OPERATION 2 ASS'Y



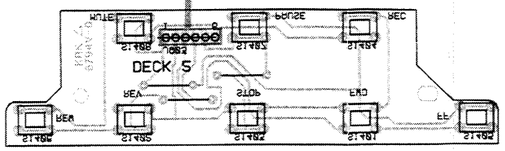
HX ASS'Y (DECK II)



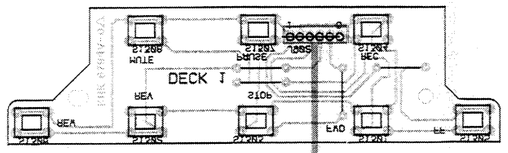




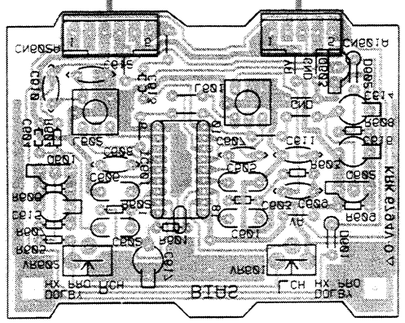
ASS'Y
DISPLAY



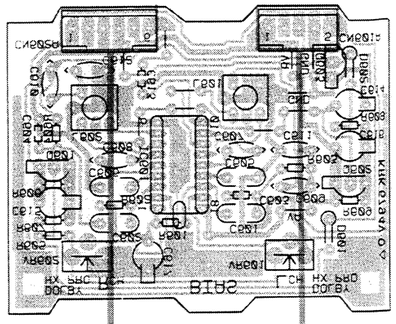
ASS'Y
OPERATION S



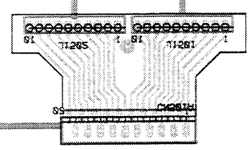
ASS'Y
OPERATION I



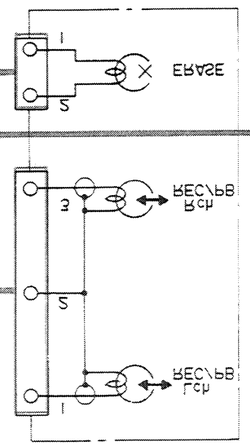
HX ASS'Y (DECK II)

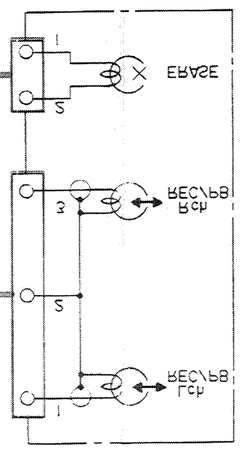


HX ASS'Y (DECK I)



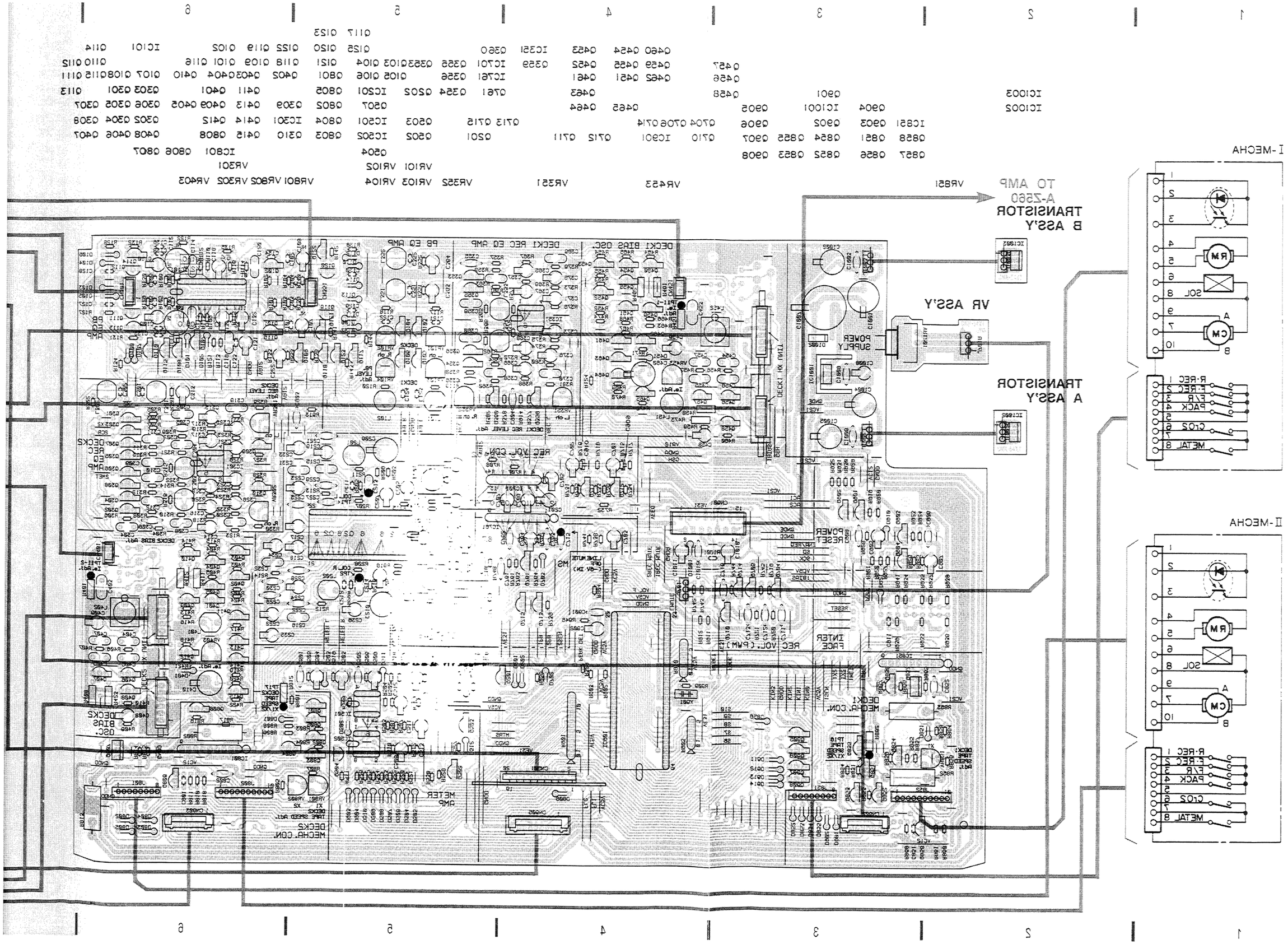
ASS'Y
CONNECTION





● View from soldering side

CT-S660WR


TO AMP
A-Z560
TRANSISTOR
B ASS'Y
VR ASS'Y
TRANSISTOR
A ASS'Y
POWER
SUPPLY
I-MECHA
II-MECHA
R·REC
F·REC
F/R
PACK
CLOS
METAL
SOL
RM
CM
DECK1 REC EQ AMP
PB EQ AMP
DECK1 BIAS OSC.
REC VOL COM.
METER
AMP
MECHA. CON.
DECK1
DECK2
INTER
FACE
REC
VOL.(PWM)
MUTE

4. P.C.B's PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

Mark	No.	Description	Parts No.
VR ASS'Y			
		RESISTOR	
	VR1201	VARIABLE RESISTOR (100KB)	RCS1012
TR A ASS'Y			
		SEMICONDUCTOR	
⚠	IC1002	REGULATOR IC	NJM7812FA
TR B ASS'Y			
		SEMICONDUCTOR	
⚠	IC1003	REGULATOR IC	NJM7812FA
OPERATION 1 ASS'Y			
		SWITCHES	
	S1301-S1308	TACT SWITCH (FWD, REV, STOP, REC, FF, REW, PAUSE, MUTE)	RSG-155
OPERATION 2 ASS'Y			
		SWITCHES	
	S1401-S1408	TACT SWITCH (FWD, REV, STOP, REC, FF, REW, PAUSE, MUTE)	RSG-155
CONNECTION ASS'Y			
		OTHERS	
	CN501	CONNECTOR 20P	BTEM20P-1R
HX ASS'Y			
		SEMICONDUCTORS	
	IC601	DOLBY HX PRO IC	UPC1297CA
	Q601, Q602	TRANSISTOR	2SA1309A
	Q603	TRANSISTOR	DTC124ES
	D601, D602	DIODE	1SS254

Mark	No.	Description	Parts No.
		COILS	
	L601, L602	COIL	RTD1030
		CAPACITORS	
	C601, C602	AUDIO FILM CAPACITOR	CFTXA103J50
	C603, C604	AXIAL CERAMIC CAPACITOR	CKPUYB821K50
	C605, C606	AUDIO FILM CAPACITOR	CFTXA223J50
	C607, C608	CERAMIC CAPACITOR	CGCYX473K25
	C609, C610	CERAMIC CAPACITOR	CCCSL101K500
	C611, 612	CERAMIC CAPACITOR (430P, 500V)	RCG1005
	C613	AXIAL CERAMIC CAPACITOR	CKPUYB101K50
	C614	ELECTR. CAPACITOR	CEASR10M50
	C615	ELECTR. CAPACITOR	CEAS100M50
	C616	ELECTR. CAPACITOR	CEAS4R7M50
	C617	ELECTR. CAPACITOR	CEAS100M50
		RESISTORS	
	VR601, VR602	SEMI-FIXED (22K)	VRTB6HS223
		OTHER RESISTORS	RD1/6PM□□□J
MAIN ASS'Y			
		SEMICONDUCTORS	
⚠	IC1001	REGULATOR IC	NJM78M05FA
	IC101	PB-EQ AMP IC	CXA1145BP
	IC201	DOLBY-B,C IC	CX20187
	IC301, IC351	OP-AMP IC	M5218P
	IC501	OP-AMP IC	M5218P
	IC502	COMPARATOR	M5233P
	IC701	VCA IC	M51131L
	IC761	IC	BA335
	IC801, IC851	IC	BA6218
	IC901	CPU	PD3150A
	Q101, Q102	TRANSISTOR	DTC124ES
	Q103-Q106	TRANSISTOR	DTC114ES
	Q107-Q109	TRANSISTOR	DTC124ES
	Q110	TRANSISTOR	DTA124ES
	Q111, Q112	N-FET	2SK373
	Q113, Q114	TRANSISTOR	2SC3311A
	Q115, Q116	TRANSISTOR	DTC124ES
	Q117	TRANSISTOR	DTA124ES

Mark	No.	Description	Parts No.
	Q118	TRANSISTOR	DTC124ES
	Q119, Q120	N-FET	2SK373
	Q121, Q122	TRANSISTOR	2SC3311A
	Q123, Q201	TRANSISTOR	DTC124ES
	Q202	TRANSISTOR	DTA124ES
	Q301-Q308	TRANSISTOR	DTC114TS
	Q309, Q310	TRANSISTOR	2SD1302
	Q353-Q356	TRANSISTOR	DTC114TS
	Q359, Q360	TRANSISTOR	2SD1302
	Q401	TRANSISTOR	DTC124ES
	Q402	TRANSISTOR	DTA124ES
	Q403	TRANSISTOR	DTC124ES
	Q404, Q405	TRANSISTOR	2SC3311A
	Q406-Q408	TRANSISTOR	2SC3243
	Q409-Q411	TRANSISTOR	2SA1283
	Q412	TRANSISTOR	2SC3311A
	Q413	TRANSISTOR	2SC3243
	Q414, Q415	TRANSISTOR	2SC3311A
	Q451, Q453	TRANSISTOR	DTC124ES
	Q452	TRANSISTOR	DTA124ES
	Q454, Q455	TRANSISTOR	2SC3311A
	Q456-Q458	TRANSISTOR	2SC3243
	Q459-Q461	TRANSISTOR	2SA1283
	Q462	TRANSISTOR	2SC3311A
	Q463	TRANSISTOR	2SC3243
	Q464, Q465	TRANSISTOR	2SC3311A
	Q502	TRANSISTOR	2SA1309A
	Q503	TRANSISTOR	DTC124ES
	Q504	N-FET	2SK373
	Q507	TRANSISTOR	DTC114ES
	Q704	TRANSISTOR	DTC124ES
	Q706	TRANSISTOR	2SC3311A
	Q710	TRANSISTOR	DTC114ES
	Q711, Q712	TRANSISTOR	2SD1302
	Q713	TRANSISTOR	DTA124ES
	Q714	TRANSISTOR	2SC3311A
	Q715	TRANSISTOR	DTA124ES
	Q761	TRANSISTOR	2SC3311A
	Q801-Q803	TRANSISTOR	2SC3246
	Q804	TRANSISTOR	2SA1309A
	Q805	TRANSISTOR	DTC124ES
	Q806	TRANSISTOR	2SC3311A
	Q807	TRANSISTOR	2SD1266
	Q808	TRANSISTOR	2SC3311A
	Q851-Q853	TRANSISTOR	2SC3246
	Q854	TRANSISTOR	2SA1309A
	Q855	TRANSISTOR	DTC124ES
	Q856	TRANSISTOR	2SC3311A
	Q857	TRANSISTOR	2SD1266
	Q858	TRANSISTOR	2SC3311A
	Q901-Q904	TRANSISTOR	2SC3311A
	Q905-Q908	TRANSISTOR	DTC124ES
⚠	D1001	ZENER DIODE	MTZ5.6B
	D1002	DIODE	1SR35-100A
	D101-D114	DIODE	1SS254

Mark	No.	Description	Parts No.
	D201, D202	DIODE	1SS254
	D401, D451	DIODE	MTZ9.1B
	D501-D510	DIODE	1SS254
⚠	D511	ZENER DIODE	MTZ5.1B
	D512	DIODE	1SS254
	D701-D703	DIODE	1SS254
	D801, D851	DIODE	1SS252
	D802-D806	DIODE	1SS254
	D852-D856	DIODE	1SS254
	D901-D904	DIODE	1SS254
	D906	DIODE	1SS254
	D910-D914	DIODE	1SS254
	D921, D990	DIODE	1SS254

COILS AND FILTERS

L101, L102	COIL	RTF1099
L201, L202	COIL	RTF1005
L301, L302	COIL	RTF1102
L303, L304	COIL	RTF1103
L351, L352	COIL	RTF1102
L353, L354	COIL	RTF1103
L401	COIL	RTF1061
L402	COIL	RTD1022
L451	COIL	RTF1061
L452	COIL	RTD1022
F201, F202	MPX FILTER	RTF1059

CAPACITORS

C1001	ELECTR. CAPACITOR	CEAS471M25
C1002	ELECTR. CAPACITOR	CEAS221M16
C1003	CERAMIC CAPACITOR	CKCYF103Z50
C1004	ELECTR. CAPACITOR	CEAS101M25
C1005	ELECTR. CAPACITOR	CEAS221M16
C1006	CERAMIC CAPACITOR	CKCYF103Z50
C1007	ELECTR. CAPACITOR	CEAS222M25
C1008	ELECTR. CAPACITOR	CEAS470M16
C1009	CERAMIC CAPACITOR	CKCYF103Z50
C1010	ELECTR. CAPACITOR	CEAS100M50
C1011	ELECTR. CAPACITOR	CEAS470M16
C1012	CERAMIC CAPACITOR	CKCYF103Z50
C101, C102	AXIAL CERAMIC CAPACITOR	CKPUYB471K50
C103, C104	AXIAL CERAMIC CAPACITOR	CKPUYB561K50
C105, C106	AXIAL CERAMIC CAPACITOR	CKPUYB102K50
C107-C110	ELECTR. CAPACITOR	CEANL100M16
C111, C112	ELECTR. CAPACITOR	CEANL101M10
C113, C114	AUDIO FILM CAPACITOR	CFTXA822J50
C117, C118	ELECTR. CAPACITOR	CEAS4R7M50
C119, C120	AUDIO FILM CAPACITOR	CFTXA223J50
C121, C122	AXIAL CERAMIC CAPACITOR	CKPUYB221K50
C123, C124	AXIAL CERAMIC CAPACITOR	CKPUYB391K50

Mark	No.	Description	Parts No.
	C127-C130	AXIAL CERAMIC CAPACITOR	CCPUSL100J50
	C131, C132	ELECTR. CAPACITOR	CEAS470M16
	C133, C134	AXIAL CERAMIC CAPACITOR	CKPUYB681K50
	C135-C138	AXIAL CERAMIC CAPACITOR	CKPUYB101K50
	C201-C204	ELECTR. CAPACITOR	CEAS010M50
	C205, C206	ELECTR. CAPACITOR	CEAS100M50
	C207, C208	ELECTR. CAPACITOR	CEAS010M50
	C209, C210	ELECTR. CAPACITOR	CEAS331M16
	C211, C212	AXIAL CERAMIC CAPACITOR	CKPUYB681K50
	C213, C214	AUDIO FILM CAPACITOR	CFTXA332J50
	C215, C216	AUDIO FILM CAPACITOR	CFTXA472J50
	C217, C218	ELECTR. CAPACITOR	CEASR47M50
	C219, C220	ELECTR. CAPACITOR	CEASR15M50
	C221, C222	CERAMIC CAPACITOR	CGCYX153K25
	C223, C224	ELECTR. CAPACITOR	CEASR22M50
	C225, C226	CERAMIC CAPACITOR	CGCYX683K25
	C227, C228	CERAMIC CAPACITOR	CGCYX473K25
	C229, C230	AUDIO FILM CAPACITOR	CFTXA682J50
	C231, C232	AUDIO FILM CAPACITOR	CFTXA103J50
	C233-C236	ELECTR. CAPACITOR	CEAS4R7M50
	C237	ELECTR. CAPACITOR	CEAS470M16
	C301, C302	AXIAL CERAMIC CAPACITOR	CKPUYB221K50
	C303, C304	AUDIO FILM CAPACITOR	CFTXA472J50
	C305, C306	CERAMIC CAPACITOR	CGCYX153K25
	C307, C308	AUDIO FILM CAPACITOR	CFTXA223J50
	C309, C310	AUDIO FILM CAPACITOR	CFTXA272J50
	C311, C312	AUDIO FILM CAPACITOR	CFTXA472J50
	C313, C314	ELECTR. CAPACITOR	CEAS4R7M50
	C315, C316	ELECTR. CAPACITOR	CEASR15M50
	C317, C318	ELECTR. CAPACITOR	CEAS100M50
	C319, C320	AUDIO FILM CAPACITOR	CFTXA222J50
	C321	ELECTR. CAPACITOR	CEAS470M16
	C322	ELECTR. CAPACITOR	CEAS010M50
	C323	ELECTR. CAPACITOR	CEAS470M16
	C325, C326	ELECTR. CAPACITOR	CEAS010M50
	C351, C352	AXIAL CERAMIC CAPACITOR	CKPUYB221K50
	C355, C356	CERAMIC CAPACITOR	CGCYX153K25
	C357, C358	AUDIO FILM CAPACITOR	CFTXA223J50
	C359, C360	AUDIO FILM CAPACITOR	CFTXA682J50
	C363, C364	ELECTR. CAPACITOR	CEAS4R7M50
	C365, C366	ELECTR. CAPACITOR	CEASR15M50
	C367, C368	ELECTR. CAPACITOR	CEAS100M50
	C369, C370	AUDIO FILM CAPACITOR	CFTXA222J50
	C371, C373	ELECTR. CAPACITOR	CEAS470M16
	C375, C376	ELECTR. CAPACITOR	CEAS010M50
	C403	CAPACITOR	CQPA682J100
	C404	AUDIO FILM CAPACITOR	CFTXA273J50
	C405	AUDIO FILM CAPACITOR	CFTXA682J50
	C406, C407	AUDIO FILM CAPACITOR	CFTXA332J50
	C408, C409	ELECTR. CAPACITOR	CEAS470M16
	C410	ELECTR. CAPACITOR	CEAS221M16
	C453	CAPACITOR	CQPA682J100
	C454	AUDIO FILM CAPACITOR	CFTXA273J50
	C455	AUDIO FILM CAPACITOR	CFTXA682J50
	C456, C457	AUDIO FILM CAPACITOR	CFTXA332J50
	C458, C459	ELECTR. CAPACITOR	CEAS470M16
	C460	ELECTR. CAPACITOR	CEAS221M16
	C501, C502	CERAMIC CAPACITOR	CGCYX683K25
	C503, C504	ELECTR. CAPACITOR	CEAS470M16
	C505, C506	ELECTR. CAPACITOR	CEASR47M50
	C509	ELECTR. CAPACITOR	CEAS470M16
	C511, C512	ELECTR. CAPACITOR	CEAS010M50
	C513	AXIAL CERAMIC CAPACITOR	CKPUYB471K50
	C701, C702	ELECTR. CAPACITOR	CEAS100M50
	C703	ELECTR. CAPACITOR	CEAS470M16
	C705, C706	ELECTR. CAPACITOR	CEAS470M16
	C707	ELECTR. CAPACITOR	CEAS4R7M50
	C711-C713	CERAMIC CAPACITOR	CKCYF103Z50
	C715, C716	CERAMIC CAPACITOR	CKCYF103Z50
	C717, C718	CERAMIC CAPACITOR	CGCYX104K25
	C761	CERAMIC CAPACITOR	CGCYX473K25
	C762, C763	CERAMIC CAPACITOR	CGCYX104K25
	C764	ELECTR. CAPACITOR	CEASR47M50
	C801	AXIAL CERAMIC CAPACITOR	CKPUYY103M16
	C802	CERAMIC CAPACITOR	CGCYX104K25
	C851	AXIAL CERAMIC CAPACITOR	CKPUYY103M16
	C852	CERAMIC CAPACITOR	CGCYX104K25
	C901	CERAMIC CAPACITOR	CKCYF103Z50
	C902	ELECTR. CAPACITOR	CEAS470M16
	C903, C904	CERAMIC CAPACITOR	CKCYF103Z50
	C905	ELECTR. CAPACITOR	CEAS4R7M50
	C906	CERAMIC CAPACITOR	CKCYF103Z50
	C907	ELECTR. CAPACITOR	CEAS100M50
	C908	CERAMIC CAPACITOR	CKCYF103Z50
	C909, C910	CERAMIC CAPACITOR	CKCYB102K50
	C911	AXIAL CERAMIC CAPACITOR	CKPUYB102K50

RESISTORS

	VR101-VR104 SEMI-FIXED (22K)	VRTB6VS223
	VR301-VR302 SEMI-FIXED (22K)	VRTB6VS223
	VR351, VR352 SEMI-FIXED (22K)	VRTB6VS223
	VR403, VR453 METAL GLAZE SEMI-FIXED (100B)	RCP-031
	VR801 SEMI-FIXED (22K)	VRTG6VS223
	VR802 SEMI-FIXED (10K)	VRTS6VS103
	VR851 SEMI-FIXED (22K)	VRTG6VS223

Mark	No.	Description	Parts No.
	R401, R408, R411, R412, R423, R451, R458, R461, R462, R473		RD1/2LF□□□J
	R802	METAL OXIDE	RS2LMF200J
	R812		RD1/4LF222J
	R813	METAL OXIDE	RS3LMF101J
	R852	METAL OXIDE	RS2LMF200J
	R862		RD1/4LF222J
	R863	METAL OXIDE	RS3LMF101J
	R901	RESISTOR ARRAY	RA12T104J
	R905	RESISTOR ARRAY	RA5T104J
	R910	RESISTOR ARRAY	RA6T223J
	OTHER	RESISTORS	RD1/6PM□□□J

OTHERS

CN501	CONNECTOR (20P)	BTEM20S-1S
X901	CERAMIC RESONATOR	VSS1014

DISPLAY ASS'Y

SEMICONDUCTORS

D1501-D1504	DIODE	1SS254

SWITCHES

S1501-S1511	TACT SWITCH	RSG1009
S1512, S1513	SLIDE SWITCH	RSH1019

OTHER

FL TUBE		RAW1042

5. ADJUSTMENT

5.1 MECHANICAL ADJUSTMENTS

1. Tape speed adjustment and check

No.	Deck	Mode	Test tape	Adjustment point	Standard/Rating (Playback frequency)	Remarks
1	I	Normal playback	STD-301 (3kHz)	After playback for 1 minute, connect a jumper wire to TP16 and ground.		
2		Double speed playback		Check	6000 Hz ±600 Hz	
3		Normal playback		After check, remove the jumper wire from TP16.		
4	II			After playback for 1 minute, connect a jumper wire to TP17 and ground.		
5		Double speed playback		VR802	The valve must be within ±10Hz, comparing to the measuring value of the step 2 (Deck I).	
6		Normal playback		After check, remove the jumper wire from TP17.		
7				VR801	3000 Hz ±5 Hz	
8	I			VR851	The value must be within ±5Hz, comparing to the adjusting value of the step 7 (Deck II).	

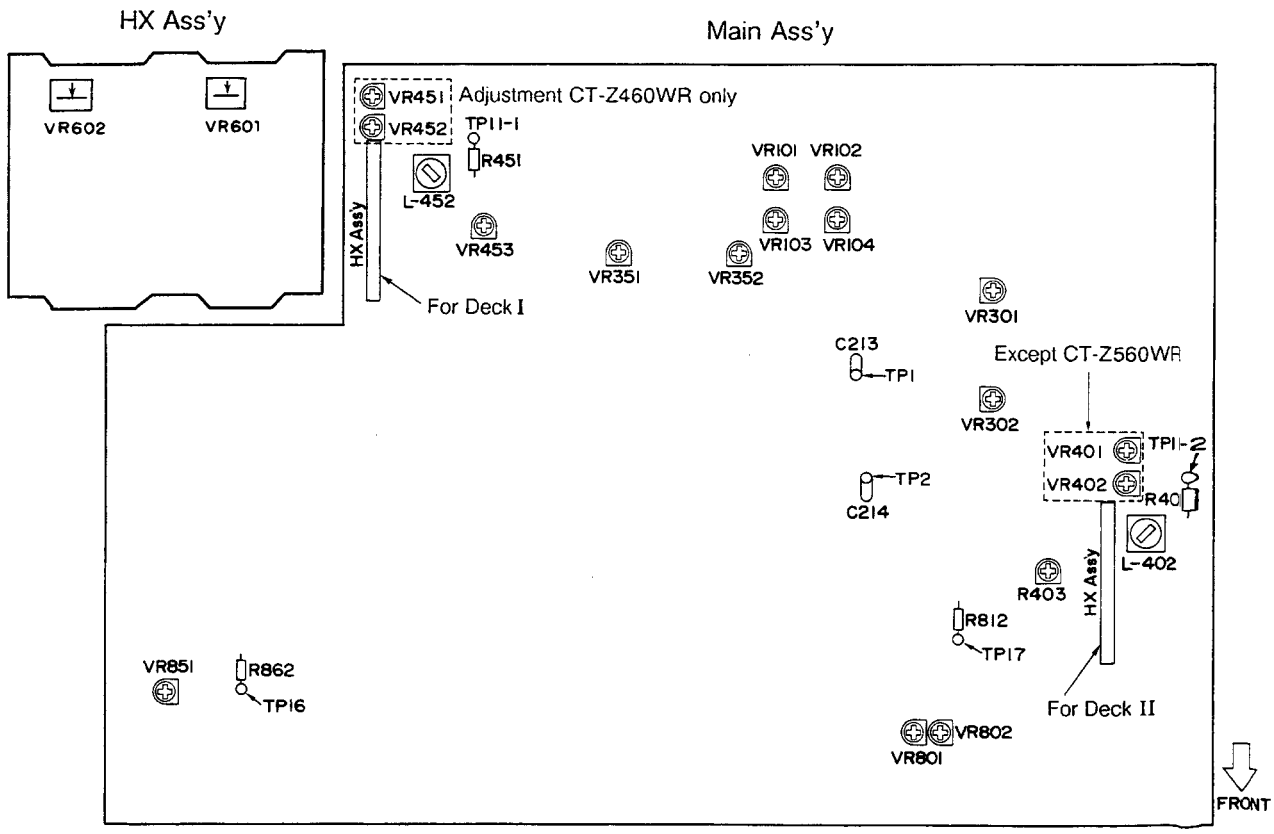


Figure 5-1 Adjustment Points

5.2 ELECTRICAL ADJUSTMENTS

Adjustment Conditions

1. The mechanical adjustments must be completed first.
2. The head must be cleaned and demagnetized.
3. Turn power on allow the deck to warm up for at least a few minutes before commencing any electrical adjustments.
4. The reference signal is 0dBv = 1Vrms.
5. Connect a 50 kilo-ohm (or between 47 to 52 kilo-ohm) load resistance to the OUTPUT terminals.
6. Unless otherwise specified, the switches listed below are left in the positions indicated.
   DOLBY NR : OFF
   TAPE SELECTOR : NORM

Test Tapes

STD-331B : Playback adjustments (See Fig. 5-2)
STD-630 : NORMAL blank tape
STD-620 : CrO_2 blank tape
STD-610 : METAL blank tape

List of Adjustments

Playback sections

1. Head azimuth adjustment.
2. Playback level adjustment.

Recording sections

1. Bias oscillator adjustment.
2. Erase current adjustment.
3. Recording bias adjustment.
4. Recording level adjustment.
5. Level meter check.

NOTE: This unit has an automatic tape selection feature.

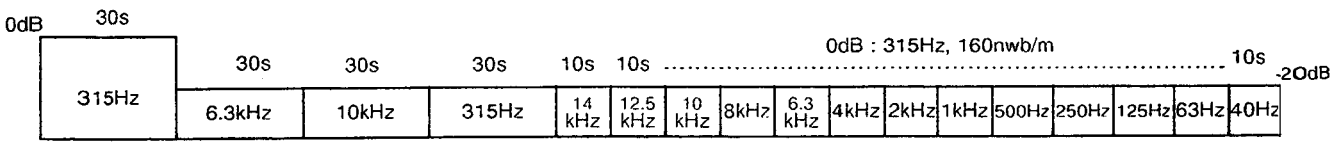


Fig. 5-2 Constants of the test tape STD-331B

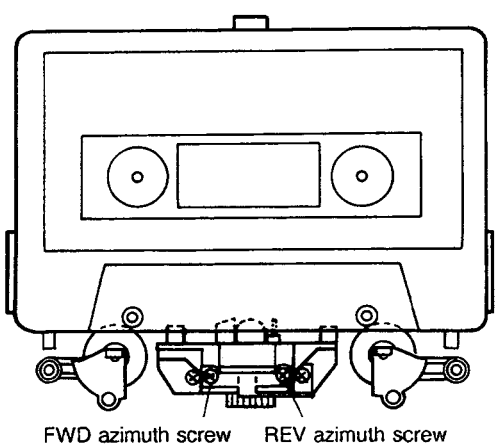


Fig. 5-3 Head azimuth adjustment

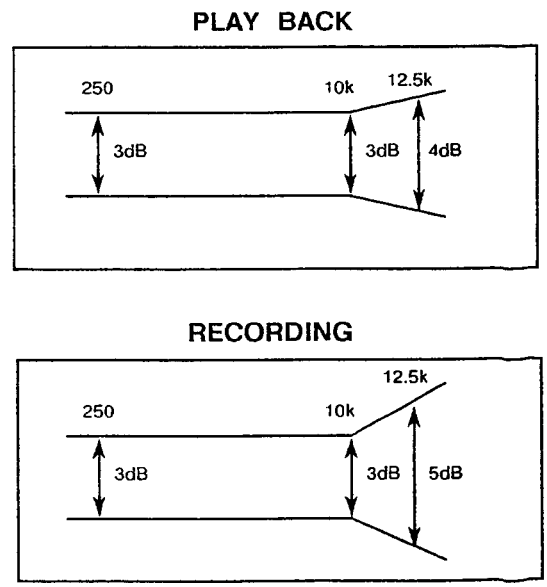


Fig. 5-4 Allowable playback frequency response zone

PLAYBACK SECTION

1. Head Azimuth Adjustment

- Turn VR 103, VR104 (Deck I) or VR101, VR102 (Deck II) to mechanical center positions.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 10kHz/–20dB section of STD-331B test tape.	Head azimuth adjustment screw. (See Fig. 5-3)	PB L/R OUT (CN901 ①.②)	Maximum playback signal level.	
2.	STOP	Lock the screw with screw lock after completing adjustment.				

2. Playback Level Adjustment

- This adjustment determines the DOLBY NR level, and must be performed with great care.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 315Hz/0dB section of the STD-331B test tape.	Deck I	VR103 (Lch) VR104 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	–14.7 dBv	
			Deck II	VR101 (Lch) VR102 (Rch)			

RECORDING SECTION

1. Bias Oscillator Adjustment

- Adjust the bias oscillator with checks set to recording mode simultaneourly. ← (Double R/P only)

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Load the STD-610 test tape with no input signal.	Deck I	L 452	TP. 11-1	105 ±0.3 KHz	Only for the CT-Z560 model.
			Deck II	L 402	TP. 11-2		

2. Erase Current Adjustment

- Adjust the bias oscillator with decks I and II set to recording mode independently. ← (Double R/P only)

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Load the STD-610 test tape with no input signal.	Deck I	VR 453	TP. 11-1	165mV AC	Deck I adjustment is not required for the CT-Z360WR model.
			Deck II	VR 403	TP. 11-2		

3. Recording Bias Adjustment

- Adjust the bias oscillator with decks I and II set to recording mode independently. ← (Double R/P only)
- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	STOP	Set the TAPE SELECTOR switch to the NORM position.					
2.	REC	Record the 315Hz and 6.3kHz signals at –20dBv input level and playback.	Deck I	For CT-Z560WR VR601 (Lch) VR602 (Rch) For CT-Z460WR VR451(Lch) VR452(Rch)	PB L/R OUT (CN901 ①.②)	Repeatedly record, playback and adjust so that the playback level of 6.3kHz signal becomes +0.5dB ±0.5dB when compared with the 315Hz signal.	Deck I adjustment is not required for the CT-Z360WR model.
			Deck II	For CT-Z560WR VR601 (Lch) VR602 (Rch) For CT-Z460WR/ Z360WR VR401(Lch) VR402(Rch)			

4. Recording Level Adjustment

- Adjust the bias oscillator with decks I and II set to recording mode independently. ← (Double R/P only)

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	STOP	Set the TAPE SELECTOR switch to the NORM position.					
2.	REC PAUSE	Apply a 315Hz/0dBv signal to the Line Input terminals, load the STD-630 test tape.	Rec Level control volume		TP. 1 (Lch) TP. 2 (Rch)	−15.2 dBv	
3.	STOP	Set the DOLBY NR switch to the ON position. (DOLBY B)					
4.	REC/ PLAY	Record the above signal onto the STD-630 test tape, and playback.	Deck I	VR351 (Lch) VR352 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	Repeatedly record, playback and adjust so that the playback signal level becomes −15.2dB.	Deck I adjustment is not required for the CT-Z360WR model.
			Deck II	VR301 (Lch) VR302 (Rch)			
5.	STOP	Set the TAPE SELECTOR switch to the CrO_2 position.					
6.	REC/ PLAY	Record the above signal onto the STD-620 test tape, and playback.	Check		TP. 1 (Lch) TP. 2 (Rch)	−15.2 dBv ± 1.5dB	
7.	STOP	Set the TAPE SELECTOR switch to the METAL position.					
8.	REC/ PLAY	Record the above signal onto the STD-610 test tape, and playback.	Check		TP. 1 (Lch) TP. 2 (Rch)	−15.2 dBv ± 1.5dB	

5. Level Meter Check

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	REC/ PAUSE	Apply a 315Hz/−10dBv (316mV) signal to the Line Input terminals.	Rec Level control volume	TP. 1 (Lch) TP. 2 (Rch)	Check that the level meters "0dB" light up within −15.2dBv ± 2dB of the signal output level.	

5. RÉGLAGE

5.1 RÉGLAGES MECANIQUES

1. Réglage et vérification de la vitesse de defilement de la bande						
No.	Platine	Mode	Bande test	Points de réglage	Spécifications/valeurs (fréquence de lecture)	Remarques
1	I	Lecture à vitesse normale	STD-301 (3kHz)	Aprés une lecture pendant 1 minute, mettre TP16 à la terre.		
2		Lecture à vitesse double		Vérifier	6000 Hz ±600 Hz	
3		Lecture à vitesse normale		Aprés vérification, déconnecter TP16 de la terre.		
4	II			Aprés une lecture pendant 1 minute, mettre TP17 à la terre.		
5		Lecture à vitesse double		VR802	Dans la limite de ±10 Hz de la valeur de vérification de l'etape 2 (platine I).	
6		Lecture à vitesse normale		Aprés vérification, déconnecter TP17 de la terre.		
7				VR801	3000 Hz ±5 Hz	
8	I			VR851	Dans la limite de ±5 Hz de la valeur de réglage de l'étape 7 (platine II).	

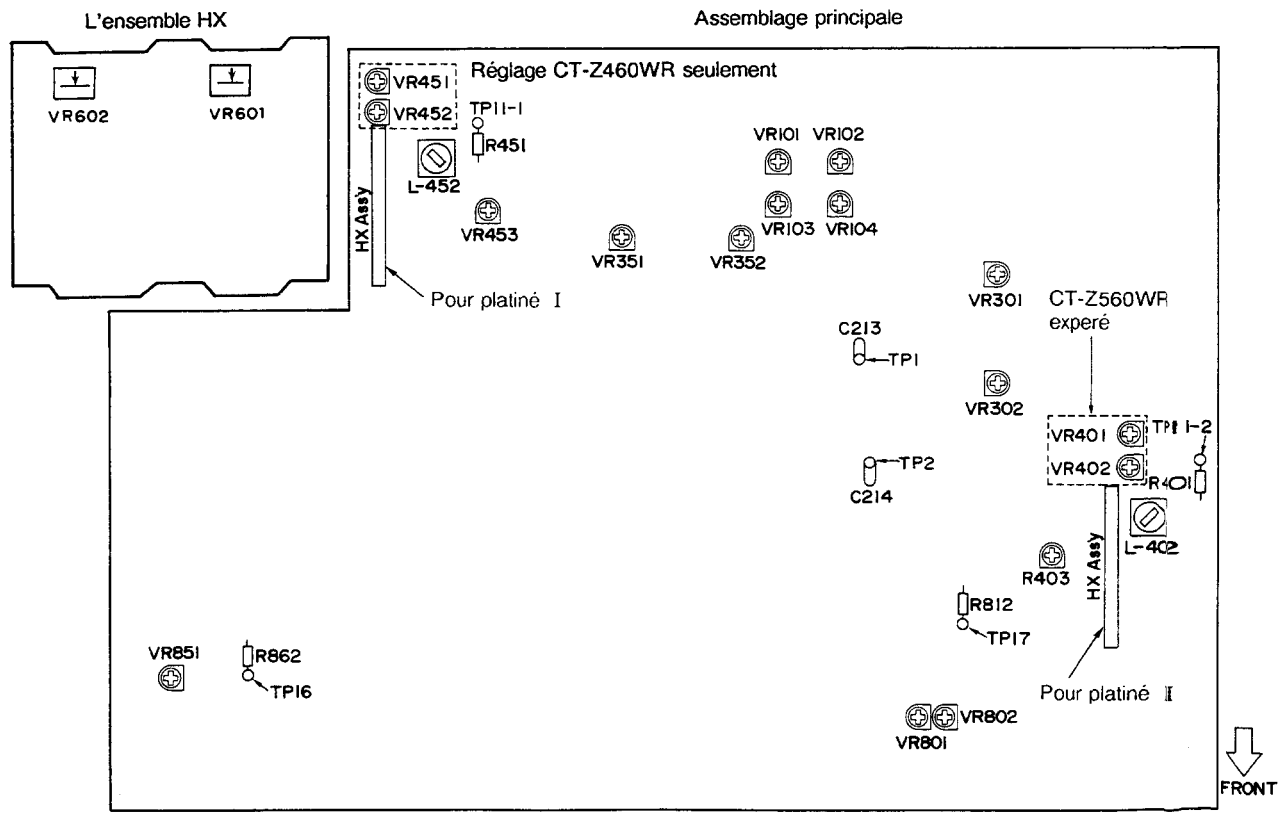


Fig. 5-1 Pointe de réglemente

5.2 REGLAGES ELECTRIQUES

Conditions de réglage

1. Les réglages mécaniques doivent tout d'abord être terminés.
2. Les têtes doivent être nettoyées et démagnétisées.
3. Mettre la platine sous tension et la laisser chauffer pendant au moins quelques minutes avant de commencer les réglages électriques.
4. Le signal de référence est de dBv = 1 Vrms.
5. Connecter une résistance de charge de 50 kohms (tolérance 47 à 52 kohms) aux bornes de sortie (OUTPUT).
6. Sauf indication contraire, les commutateurs ci-dessous doivent être laissés sur les positions indiquées.
   DOLBY NR : OFF
   Sélecteur de bande (TAPE SELECTOR) : NORM

Bandes d'essai

STD-331B : Réglages de la lecture (Voir fig. 5-2)
STD-630 : Bande vierge de type normal
STD-620 : Bande vierge de type chrome
STD-610 : Bande vierge de type métal

Liste des réglages

Sections de lecture

1. Réglage de l'azimut de la tête.
2. Réglage du niveau de lecture.

Sections d'enregistrement

1. Réglage de l'oscillateur de polarisation.
2. Réglage du courant d'effacement.
3. Réglage de la polarisation d'enregistrement.
4. Réglage du niveau d'enregistrement.
5. Vérification de l'indicateur de niveau.

Remarque : Cet appareil est équipé d'une caractéristique de sélection automatique de bande.

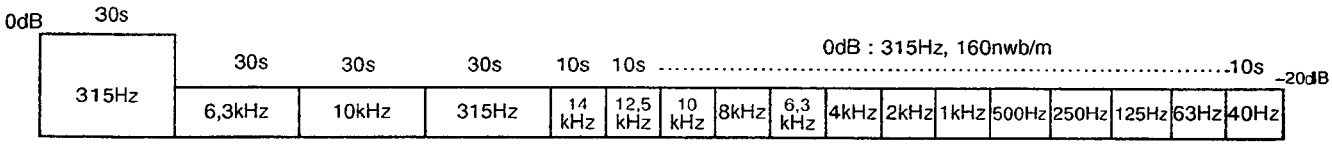


Fig. 5-2 Constantes de la bande d'essai STD-331B

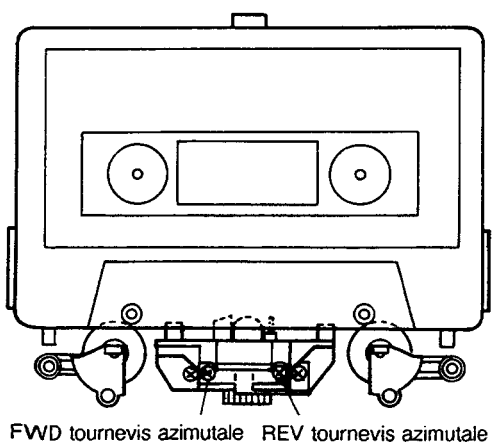


Fig. 5-3 Réglage de l'azimut de la tête

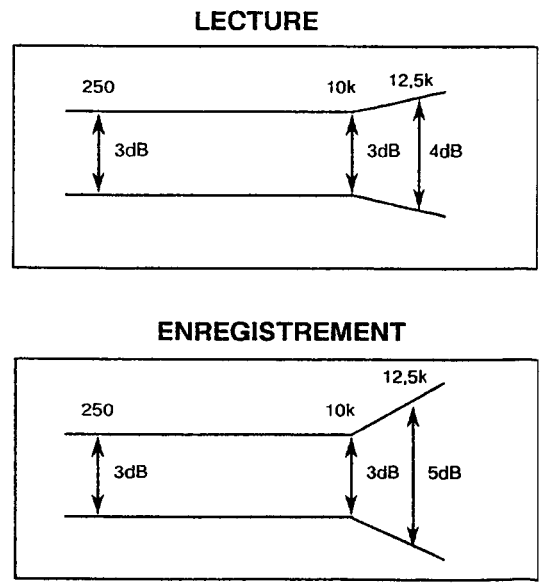


Fig. 5-4 Tolérance de la zone de réponse en fréquence de lecture

SECTION DE LECTURE

1. Réglage de l'azimut de la tête

- Tourner VR103, VR104 (Platine I) ou VR101, VR102 (Platine II) sur leur position centrale mécanique.

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage	Points de mesure	Valeur de réglage	Remarques
1.	PLAY	Reproduire la section 10 kHz/–20 dB de la bande d'essai STD-331B.	Vis de réglage de l'azimut de la tâte. (Voir fig. 5-3)	PB L/R sortie de ligne (CN901 ①.②)	Niveau du signal de reproduction maximum.	
2.	STOP	Verrouiller la vis avec le verrouillage de vis après avoir terminé le réglage.				

2. Réglage du niveau de lecture

- Ce réglage détermine le niveau DOLBY NR et il doit être effectué très soigneusement.

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	PLAY	Reproduir la section 315Hz/0dB de la bande déssai STD-331B.	Platine I	VR103 (can. G) VR104 (can. D)	TP. 1 (can. G) TP. 2 (can. D)	–14,7 dBv	
			Platine II	VR101 (can. G) VR102 (can. D)			

SECTION D'ENREGISTREMENT

1. Réglage de l'oscillateur de polarisation

- Régler l'oscillateur de polarisation, les platines étant réglées simultanément dans le mode d'enregistrement. ← (Enr/lec double seulement)

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	REC	Charger la bande d'essai STD-610 et n'introduire aucun signal.	Platine I	L 452	TP. 11-1	105 ±0,3kHz	Seulement pour le modèle CT-Z560WR.
			Platine II	L 402	TP. 11-2		

2. Réglage du courant d'effacement

- Régler l'oscillateur de polarisation, les platines I et II étant réglées indépendamment dans le mode d'enregistrement. ← (Enr/lec double seulement)

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	REC	Charger la bande d'essai STD-610 et n'introduire aucun signal.	Platine I	VR 453	TP. 11-1	165mV AC	L'ajustement du platine I n'est pas requis pour le modèle CT-Z360WR.
			Platine II	VR 403	TP. 11-2		

3. Réglage de la polarisation d'enregistrement

- Régler l'oscillateur de polarisation, les platines I et II étant réglées indépendamment dans le mode d'enregistrement. ← (Enr/lec double seulement)
- Après le réglage, des précautions doivent être prises pour éviter une sous-polarisation en vérifiant le taux de distorsion.

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	STOP	Régler le sélecteur de bande (TAPE SELECTOR) sur la position NORM.					
2.	REC	Enregistrer les signaux 315 Hz et 6,3 kHz à un niveau d'entrée de –20 dBv et les reproduire.	Platine I	Pour CT-Z560WR VR601(Can.G) VR602(Can.D) Pour CT-Z460WR VR451(Can.G) VR452(Can.D)	PB L/R sortie de ligne (CN901 ①.②)	Enregistrer, reproduire et régler de manière répétée de sorte que le niveau de lecture du signal 6,3 kHz devienne +0,5dB ±0,5dB lorsqu'il est comparé avec le signal 315 Hz.	L'ajustement du platine I n'est pas requis pour le modèle CT-Z360WR.
			Platine II	Pour CT-Z560WR VR601(Can.G) VR602(Can.D) Pour CT-Z460WR/ Z360WR VR401(Can.G) VR402(Can.D)			

4. Réglage du niveau d'enregistrement

- Régler l'oscillateur de polarisation, les platines I et II étant réglées indépendamment dans le mode d'enregistrement. ← (Enr/lec double seulement)

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	STOP	Régler le sélecteur de bande (TAPE SELECTOR) sur la position NORM.					
2.	REC PAUSE	Appliquer un signal de 315 Hz/0 dBv aux bornes d'entrée de ligne, charger la bande d'essai STD-630.	Volume de la commande de niveau d'enregistrement.		TP. 1 (can. G) TP. 2 (can. D)	−15,2 dBv	
3.	STOP	Régler le commutateur DOLBY NR sur la position ON. (DOLBY B)					
4.	REC/ PLAY	Enregistrer le signal cidessus sur la bande d'essai STD-630 et le reproduire.	Platine I	VR351 (can. G) VR352 (can. D)	TP. 1 (can. G) TP. 2 (can. D)	Enregistrer, reproduire et régler de manière répétée de sorte que le niveau du signal devienne −15,2dB.	Le réglage de la Platine I (Deck I) n'est pas nécessaire pour le modèle CT-Z360WR.
			Platine II	VR301 (can. G) VR302 (can. D)			
5.	STOP	Régler le sélecteur de bande (TAPE SELECTOR) sur la position CrO_2.					
6.	REC/ PLAY	Enregistrer le signal cidessus sur la bande d'essai STD-620 et le reproduire.	Vérifier		TP. 1 (can. G) TP. 2 (can. D)	−15,2 dBv ± 1,5dB	
7.	STOP	Régler le sélecteur de bande (TAPE SELECTOR) sur la position METAL.					
8.	REC/ PLAY	Enregistrer le signal cidessus sur la bande d'essai STD-610 et le reproduire.	Vérifier		TP. 1 (can. G) TP. 2 (can. D)	−15.2 dBv ± 1,5dB	

5. Vérification de l'indicateur de niveau

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage	Points de mesure	Valeur de réglage	Remarques
1.	REC/ PAUSE	Appliquer un signal de 315 Hz/−10 dBv (316 mV) aux bornes d'entrée de ligna.	Volume de la commande de niveau d'enregistrement.	TP. 1 (can. G) TP. 2 (can. D)	Vérifier que les indicateurs de niveau "0 dB"s'allument dans la limite de −15,2dBv ±2dB du niveau de sortie du signal.	

5. AJUSTE

5.1 AJUSTE MECANICO

1. Ajuste y verificación de la velocidad de cinta

No.	Platina	Modo	Cinta de prueba	Puntos de ajuste	Especificaciones/Valores nominales (frecuencia de reproducción)	Comentarios
1	I	PLAY (velocidad normal)	STD-301 (3kHz)	Después de reproducir por 1 minuto, conectar TP16 a tierra.		
2		PLAY (velocidad doble)		Verificar	6000 Hz ±600 Hz	
3		PLAY (velocidad normal)		Después de verificar, desconectar TP16 de tierra.		
4	II			Después de reproducir por 1 minuto, conectar TP17 a tierra.		
5		PLAY (velocidad doble)		VR802	Dentro de un margen de ±10 Hz del valor de verificación del paso 2 (platina I).	
6		PLAY (velocidad normal)		Después de verificar, desconectar TP17 de tierra.		
7				VR801	3000 Hz ±5 Hz	
8	I			VR851	Dentro de un margen de ±5 Hz del valor de verificación del paso 7 (platina II).	

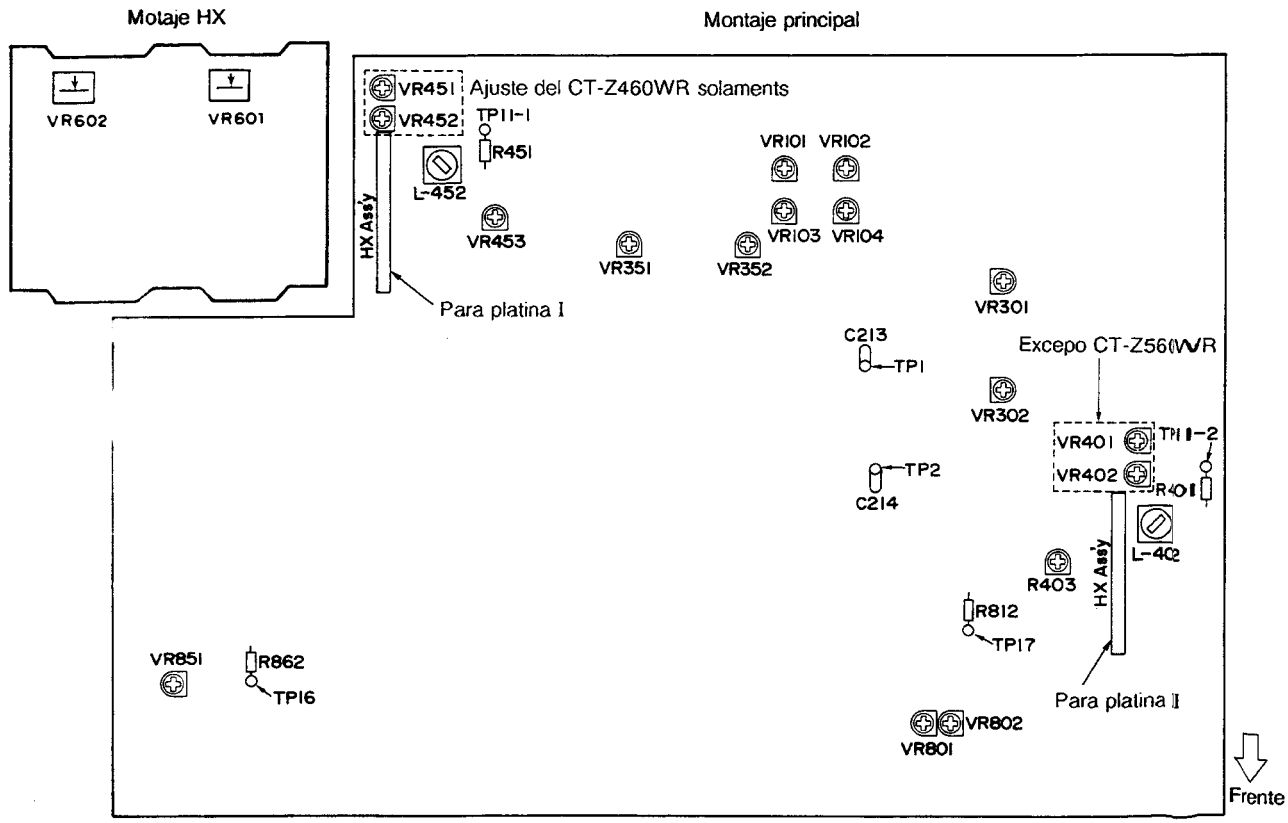


Fig. 5-1 Puntos de ajuste

5.2 AJUSTES ELÉCTRICOS

Condiciones de ajuste

1. Los ajustes mecánicos deben haberse completado primero.
2. La cabeza debe estar limpia y desmagnetizada.
3. Encienda la alimentación para permitir que la platina se caliente durante unos pocos minutos por lo menos antes de realizar cualquier ajuste eléctrico.
4. La señal de referencia es de 0 dBv = 1 Vrms.
5. Conecte una resistencia de 50 kΩ (o entre 47 y 52 kΩ) en los terminales OUTPUT.
6. A menos que se especifique lo contrario, los conmutadores indicados más abajo deben dejarse en las posiciones indicadas.
   DOLBY NR : OFF
   (TAPE SELECTOR) : NORM

Cintas de prueba

STD-331B : Ajustes de reproducción (Consulte la figura 5-2)
STD-630 : Cinta virgen NORMAL
STD-620 : Cinta virgen de CrO_2
STD-610 : Cinta virgen de METAL

Lista de ajustes

Secciones de reproducción

1. Ajuste de azimut de la cabeza
2. Ajuste del nivel de reproducción

Secciones de grabación

1. Ajuste del oscillador de polarización
2. Ajuste de la corriente de borrado
3. Ajuste de la polarización de grabación
4. Ajuste del nivel de grabación
5. Verificación del medidor de nivel

Nota:	Esta unidad posee una función automática de tipo de cinta.

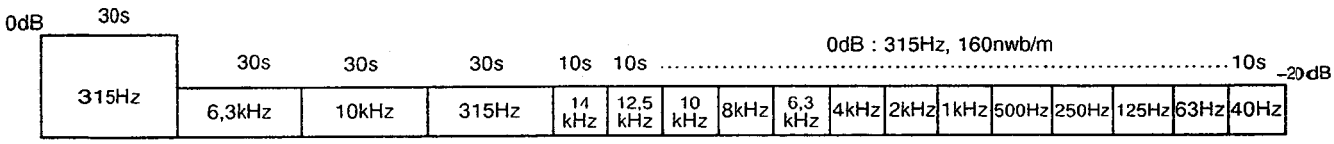


Figura 5-2 Constantes de la cinta de prueba STD-331B

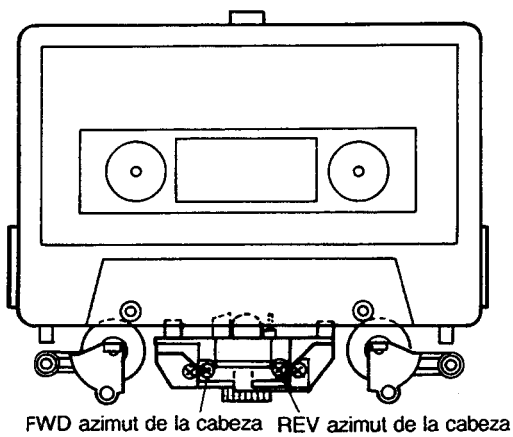


Figura 5-3 Ajuste de azimut de la cabeza

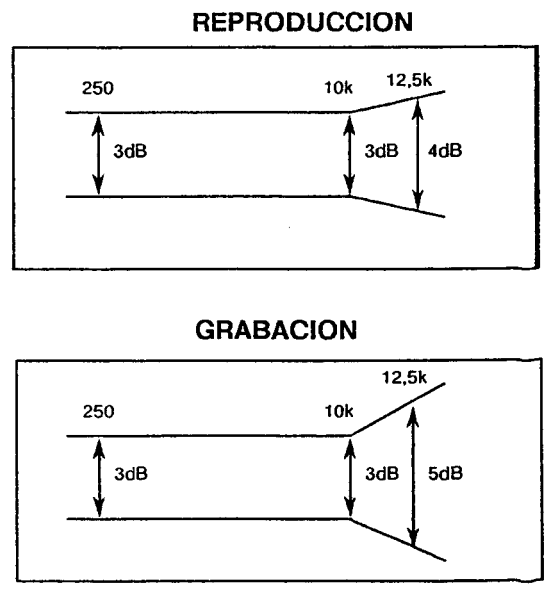


Figura 5-4 Zona permisible de respuesta de frecuencia de reproducción

SECCIÓN DE REPRODUCCIÓN

1. Ajuste del azimut de la cabeza

- Poner VR103, VR104 (Platina I) o VR101, VR102 (Platina II) en las posiciones del centro mecánico.

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste	Punto de medición	Valor de ajuste	Comentarios
1.	PLAY	Reproduzca la sección de 10 kHz/–20 dB de la cinta de prueba STD-331B.	Tornillo de ajuste del azimut de la cabeza. (Vea la figura 5-3)	PB L/R línea de salida (CN901 ①.②)	Nivel máximo de la señal de reproducción.	
2.	STOP	Bloquee el tornillo con su cierre una vez finalizado el ajuste.				

2. Ajuste del nivel de reproducción

- Este ajuste determina el nivel DOLBY NR y debe realizarse con mucho cuidado.

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	PLAY	Produzca la parte de 315 Hz/0 dB de la cinta de prueba STD-331B.	Platina I	VR103 (Lch) VR104 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	–14,7 dBv	
			Platina II	VR101 (Lch) VR102 (Rch)			

SECCIÓN DE GRABACIÓN

1. Ajuste del oscilador de polarización

- Ajuste el oscillador de polarización con los platinas puestas simultáneamente en el modo de grabación. (Doble G/R sólo)

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	REC	Introduzca la cinta de prueba STD-610 sin señal de entrada.	Platina I	L 452	TP. 11-1	105 ± 0,3 kHz	Sólo para el modelo CT-Z560.
			Platina II	L 402	TP. 11-2		

2. Ajuste de la corriente de borrado

- Ajuste el oscillador de polarización con las platinas I y II puestas independientemente en el modo de grabación. ← (Doble R/G sólo)

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	REC	Introduzca la cinta de prueba STD-610 sin señal de entrada.	Platina I	VR 453	TP. 11-1	165mV AC	El ajuste de la platina I no es necesario en el modelo CT-Z360WR.
			Platina II	VR 403	TP. 11-2		

3. Ajuste de polarización de grabación

- Ajuste el oscilador de polarización estando las platinas I y II ajustadas independientemente para el modo de grabación. ← (Doble G/R sólo)
- Una vez finalizado el ajuste, compruebe el porcentaje de distorsión para no obtener subpolarización.

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	STOP	Ponga el conmutador TAPE SELECTOR en la posición NORM.					
2.	REC	Grabe la señal de 315 Hz y 6,3 kHz a un nivel de entrada de –20 dBv y reprodúzcala.	Platina I	Para CT-Z560WR VR601(Lch) VR602(Rch) Para CT-Z460WR VR451(Lch) VR452(Rch)	PB L/R línea de salida (CN901 ①.②)	Grabe, reproduzca y ajuste repetidamente para que el nivel de la señal de reproducción de 6,3 kHz sea de +0,5dB ±0,5dB cuando se compare con la señal de 315 Hz.	El ajuste de la platina I no es necesario en el modelo CT-Z360WR.
			Platina II	Para CT-Z560WR VR601(Lch) VR602(Rch) Para CT-Z460WR/ Z360WR VR401(Lch) VR402(Rch)			

4. Ajuste del nivel de grabación

- Ajuste el oscilador de polarización con las platinas I y II puestas independientemente en el modo de grabación. ← (Doble G/R sólo)

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	STOP	Ponga el conmutador TAPE SELECTOR en la posición NORM.					
2.	REC PAUSE	Aplique una señal de 315 Hz/0 dBv a los terminales de entrada de línea e introduzca la cinta de prueba STD-630.	Control de nivel de grabación.		TP. 1 (Lch) TP. 2 (Rch)	–15,2 dBv	
3.	STOP	Ponga el conmutador DOLBY NR en la posición ON. (DOLBY B)					
4.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-630 y reprodúzcala.	Platina I	VR351 (Lch) VR352 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	Grabe, reproduzca y ajuste repetidamente para que el nivel de la señal de reproducción sea de –15,2dB.	El ajuste de la platina I no es necesario en el modelo CT-360WR.
			Platina II	VR301 (Lch) VR302 (Rch)			
5.	STOP	Ponga el conmutador TAPE SELECTOR en la posición CrO_2.					
6.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-620 y reprodúzcala.	Verifique		TP. 1 (Lch) TP. 2 (Rch)	–15,2 dBv ± 1,5dB	
7.	STOP	Ponga el conmutador TAPE SELECTOR en la posición METAL.					
8.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-610 y reprodúzcala.	Verifique		TP. 1 (Lch) TP. 2 (Rch)	–15,2 dBv ± 1,5dB	

5. Verificación del medidor de nivel

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste	Punto de medición	Valor de ajuste	Comentarios
1.	REC/ PAUSE	Aplique una señal de 315 Hz/–10 dBv (316mV) a los terminales de entrada de linea.	Control de nivel de grabación	TP. 1 (Lch) TP. 2 (Rch)	Verifique si se encienden los medidores de nivel "0 dB" cuando el nivel de salida de la señal sea –15.2dBv ±2dB. V (CC)	

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	Comentarios
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	Comentarios

grabación. (Doble

	Comentarios
	Sólo para el modelo CT-Z560.

nodo de

	Comentarios
	El ajuste de la platina I no es necesario en el modelo CT-Z360WR.

para el modo de

rización.

	Comentarios
ajuste e el Hz sea uando ñal de	El ajuste de la platina I no es necesario en el modelo CT-Z360WR.

4. Ajuste del nivel de grabación

- Ajuste el oscilador de polarización con las platinas I y II puestas independientemente en el modo de grabación. ← (Doble G/R sólo)

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	STOP	Ponga el conmutador TAPE SELECTOR en la posición NORM.					
2.	REC PAUSE	Aplique una señal de 315 Hz/0 dBv a los terminales de entrada de línea e introduzca la cinta de prueba STD-630.	Control de nivel de grabación.		TP. 1 (Lch) TP. 2 (Rch)	–15,2 dBv	
3.	STOP	Ponga el conmutador DOLBY NR en la posición ON. (DOLBY B)					
4.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-630 y reprodúzcala.	Platina I	VR351 (Lch) VR352 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	Grabe, reproduzca y ajuste repetidamente para que el nivel de la señal de reproducción sea de –15,2dB.	El ajuste de la platina I no es necesario en el modelo CT-360WR.
			Platina II	VR301 (Lch) VR302 (Rch)			
5.	STOP	Ponga el conmutador TAPE SELECTOR en la posición CrO_2.					
6.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-620 y reprodúzcala.	Verifique		TP. 1 (Lch) TP. 2 (Rch)	–15,2 dBv ± 1,5dB	
7.	STOP	Ponga el conmutador TAPE SELECTOR en la posición METAL.					
8.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-610 y reprodúzcala.	Verifique		TP. 1 (Lch) TP. 2 (Rch)	–15,2 dBv ± 1,5dB	

5. Verificación del medidor de nivel

Nº	Modo	Señal de entrada y cinta de prueba	Punto de ajuste	Punto de medición	Valor de ajuste	Comentarios
1.	REC/ PAUSE	Aplique una señal de 315 Hz/–10 dBv (316mV) a los terminales de entrada de linea.	Control de nivel de grabación	TP. 1 (Lch) TP. 2 (Rch)	Verifique si se encienden los medidores de nivel "0 dB" cuando el nivel de salida de la señal sea –15.2dBv ±2dB. V (CC)	

6. FOR CT-Z460WR/ZEBM TYPE

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56 × 10¹*	*561*	*..... RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*..... RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*..... RN2H 0 R 5 K*
1Ω	*010*		*..... RS1P 0 1 0 K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562 × 10¹*	*5621*	*..... RN1/4SR 5 6 2 1 F*

• Contrast of Miscellaneous Parts.

The CT-Z460WR/ZEBM type is the same as CT-Z560WR/ZEBM type with the exception of the following sections.

Mark	Symbol of Description	Part No.		Remarks
		CT-Z560WR	CT-Z460WR	
	Main Ass'y	Non supply	Non supply	
	HX Ass'y	Non supply	-----	
	*Display Ass'y	Non supply	Non supply	
	Door panel (L) Ass'y	RXX1257	RXX1256	
	Door panel (R)	RAH1579	RAH1584	
	Packing case	RHG1157	RHG1156	

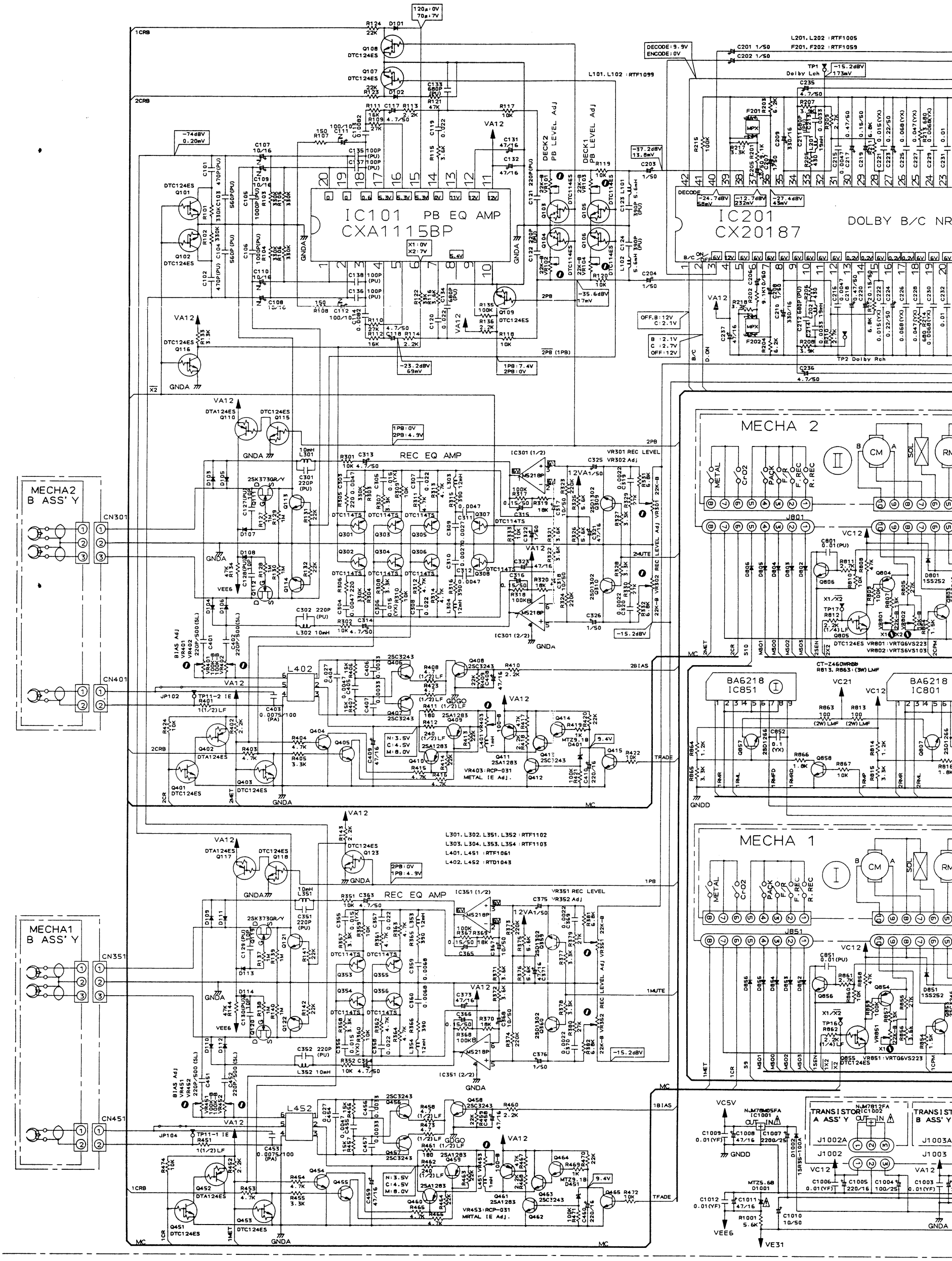
* In the Display Ass'y of CT-Z560WR and CT-Z460WR, service component parts are same.

• Main Ass'y

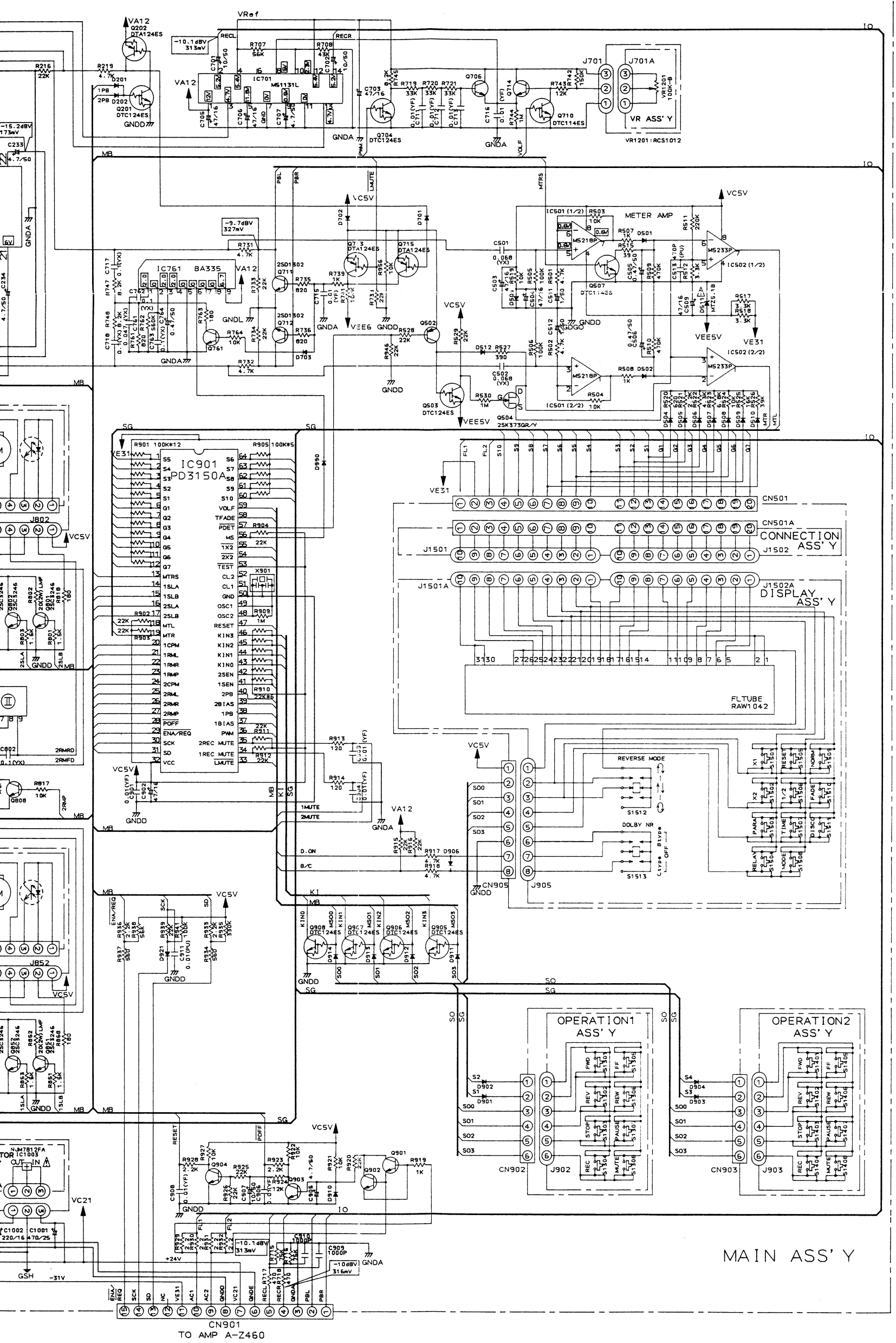
The Main Ass'y on the CT-Z460WR/ZEBM is the same as the Main Ass'y on the CT-Z560WR/ZEBM with the exception of the following sections.

Mark	Symbol of Description	Part No.		Remarks
		CT-Z560WR	CT-Z460WR	
	L402, L452	RTD1022	RTD1043	
	C401, C402, C451, C452	-----	CCCSL221K500	
	C403, C453	CQPA682J100	CQPA752J100	
	C405, C455	CFTXA682J50	CFTXA472J50	
	VR401, VR402, VR451, VR452	-----	VRTB6VS104	
	R406, R407, R456, R457	RD1/6PM333J	RD1/6PM153J	

7. SCHEMATIC DIAGRAM FOR CT-Z460WR



FOR CT-Z460WR



1. RESISTORS :
   Indicated in Ω, 1/4W, 1/6W, ±5% tolerance unless otherwise noted k ; kΩ, M ; MΩ, (F) ; ±1%, (G) ; ±2%, (K) ; ±10%, (M) ; ±20% tolerance.

2. CAPACITORS :
   Indicated in capacity (μ F) / voltage (V) unless otherwise noted p ; pF.Indication without voltage is 50V except electclytic capacitor.

3. VOLTAGE CURRENT :
   ▭ : DC voltage (V) at no input signal.

4. OTHERS
   ⊘ : Adjusting point.
   The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
   ✱marked capacitors and resistors have parts numbers.

   This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITHES (Underline indicates switch position.)

DISPLAY UNIT

S1501:	X1 COPY
S1502:	X2 COPY
S1503:	PARALLEL
S1504:	RELAY/SKIP
S1505:	RESET
S1506:	1/2 (Counter I mecha/II mecha select SW)
S1507:	TIME
S1508:	MODE
S1509:	NORM (FINE)
S1510:	FADE
S1511:	DISCO
S1512:	REVERSE MODE
S1513:	DOLBY MODE

OPERATE1 UNIT

S1301:	FWD ▷
S1302:	REV ◁
S1303:	STOP □
S1304:	REC ●
S1305:	FF ▶▶
S1306:	REW ◀◀
S1307:	PAUSE □□
S1308:	MUTE ⊙

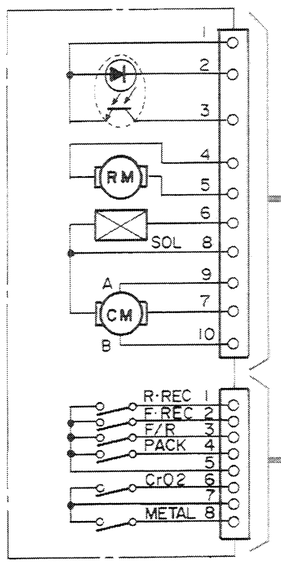
OPERATE2 UNIT

S1401:	FWD ▷
S1402:	REV ◁
S1403:	STOP □
S1404:	REC ●
S1405:	FF ▶▶
S1406:	REW ◀◀
S1407:	PAUSE □□
S1408:	MUTE ⊙

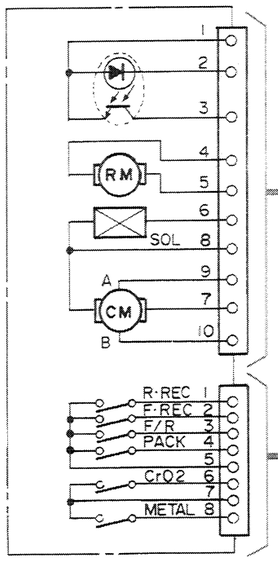
8. P.C.B. CONNECTION DIAGRAM FOR CT-Z460WR

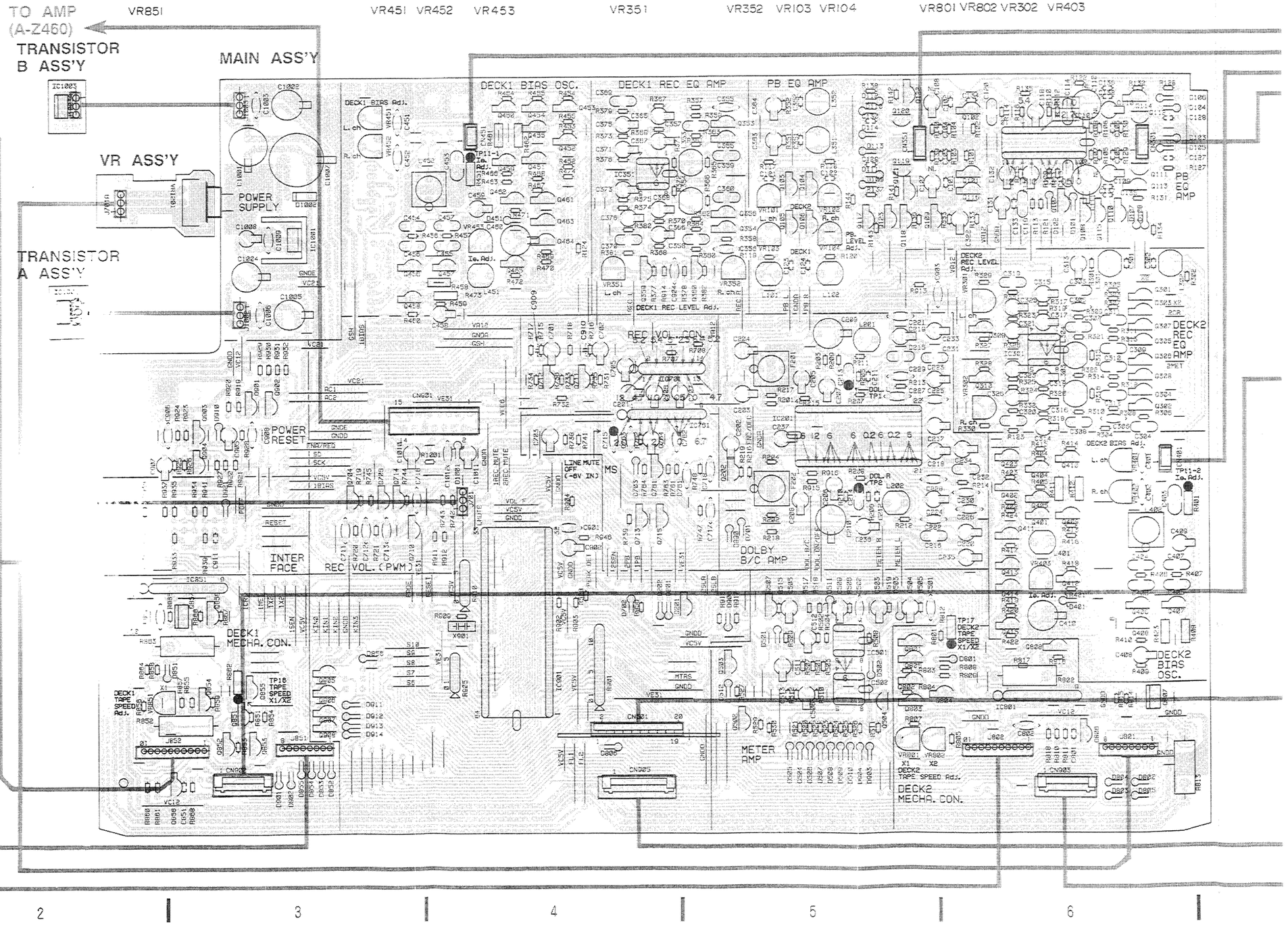
- View from component side

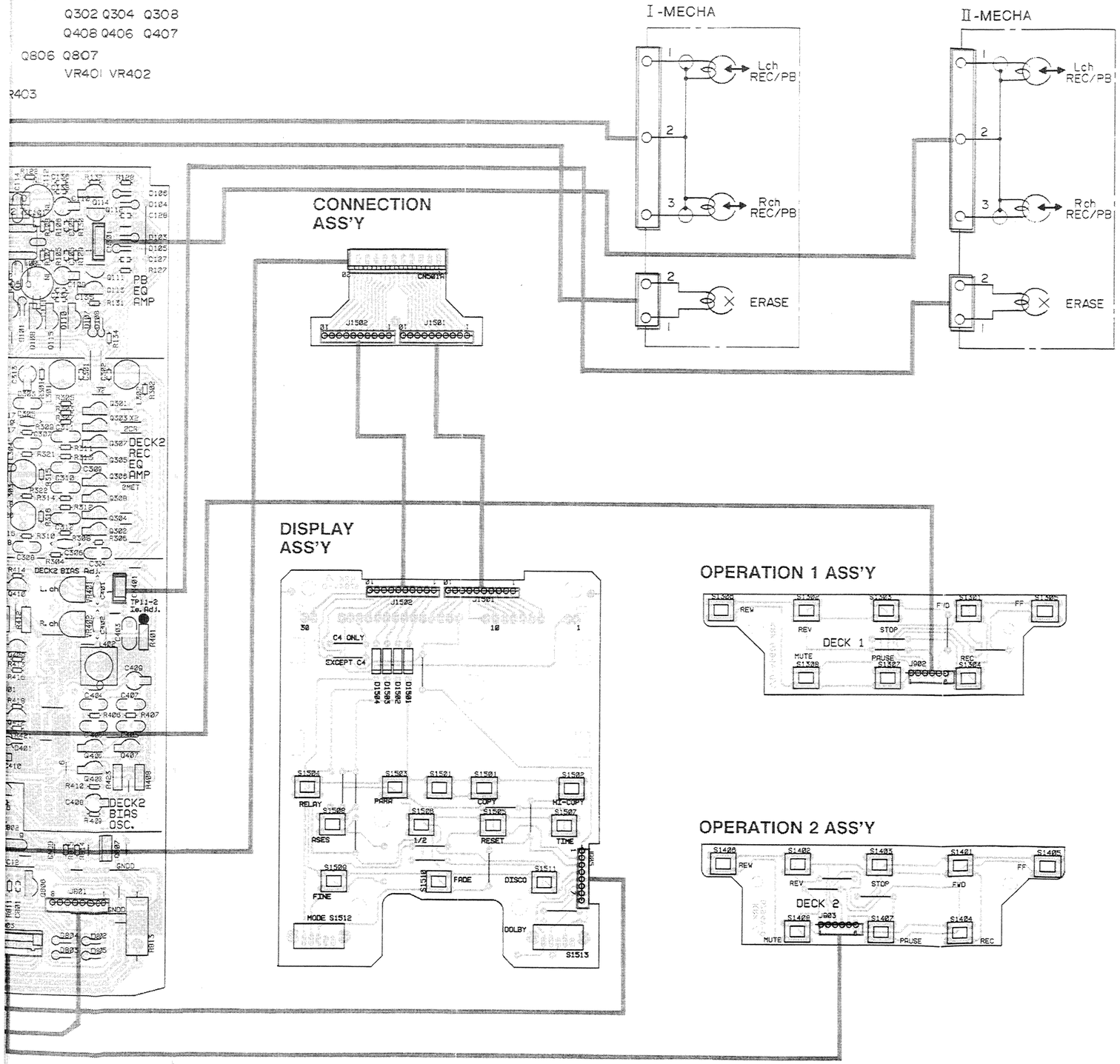
I-MECHA



II-MECHA




IC1003
IC1002
IC851 Q904 Q901 Q905
Q903 Q902 Q906 Q704 Q706 Q714
Q858 Q851 Q854 Q855 Q907 Q710
Q857 Q856 Q852 Q853 Q908
Q460 Q454 Q453 IC351 Q359 Q360 Q355 Q353 Q123 Q117
Q457 Q459 Q455 Q452 IC701 Q103 Q104 Q120 Q122 Q119 Q102 IC101 Q114
Q456 Q462 Q451 Q461 IC761 Q356 Q105 Q106 Q121 Q118 Q109 Q101 Q116 Q110 Q112
Q458 Q463 Q761 Q354 Q202 IC201 Q801 Q402 Q403 Q404 Q410 Q107 Q108 Q115 Q111
Q465 Q464 Q507 Q805 Q411 Q401 Q303 Q301 Q113
Q713 Q715 Q503 IC501 Q802 Q309 Q413 Q409 Q405 Q306 Q305 Q307
Q712 Q711 Q201 Q502 IC502 Q804 IC301 Q414 Q412 Q302 Q304 Q308
Q504 Q803 Q310 Q415 Q808 Q408 Q406 Q407
IC801 Q806 Q807
VR101 VR102 VR301 VR401 VR402
VR851 VR451 VR452 VR453 VR351 VR352 VR103 VR104 VR801 VR802 VR302 VR403
TO AMP (A-Z460)
TRANSISTOR B ASS'Y
MAIN ASS'Y
VR ASS'Y
POWER SUPPLY
TRANSISTOR A ASS'Y
DECK1 BIAS OSC.
DECK1 REC EQ AMP
PB EQ AMP
DECK1 BIAS Adj.
DECK1 REC LEVEL Adj.
PB LEVEL Adj.
DECK2 REC LEVEL Adj.
PB EQ AMP
DECK2 REC EQ AMP
DECK2 BIAS Adj.
DECK2 BIAS OSC.
POWER RESET
INTER FACE
REC VOL. (PWM)
DOLBY B/C AMP
METER AMP
DECK1 MECHA. CON.
DECK2 MECHA. CON.
DECK1 TAPE SPEED Adj.
DECK2 TAPE SPEED Adj.
TP16 TAPE SPEED X1/X2
TP17 DECK2 TAPE SPEED X1/X2
LINE MUTE OFF (-6V INJ)
REC MUTE
PB MUTE
MS
DOL R TP2
DOL L TP1

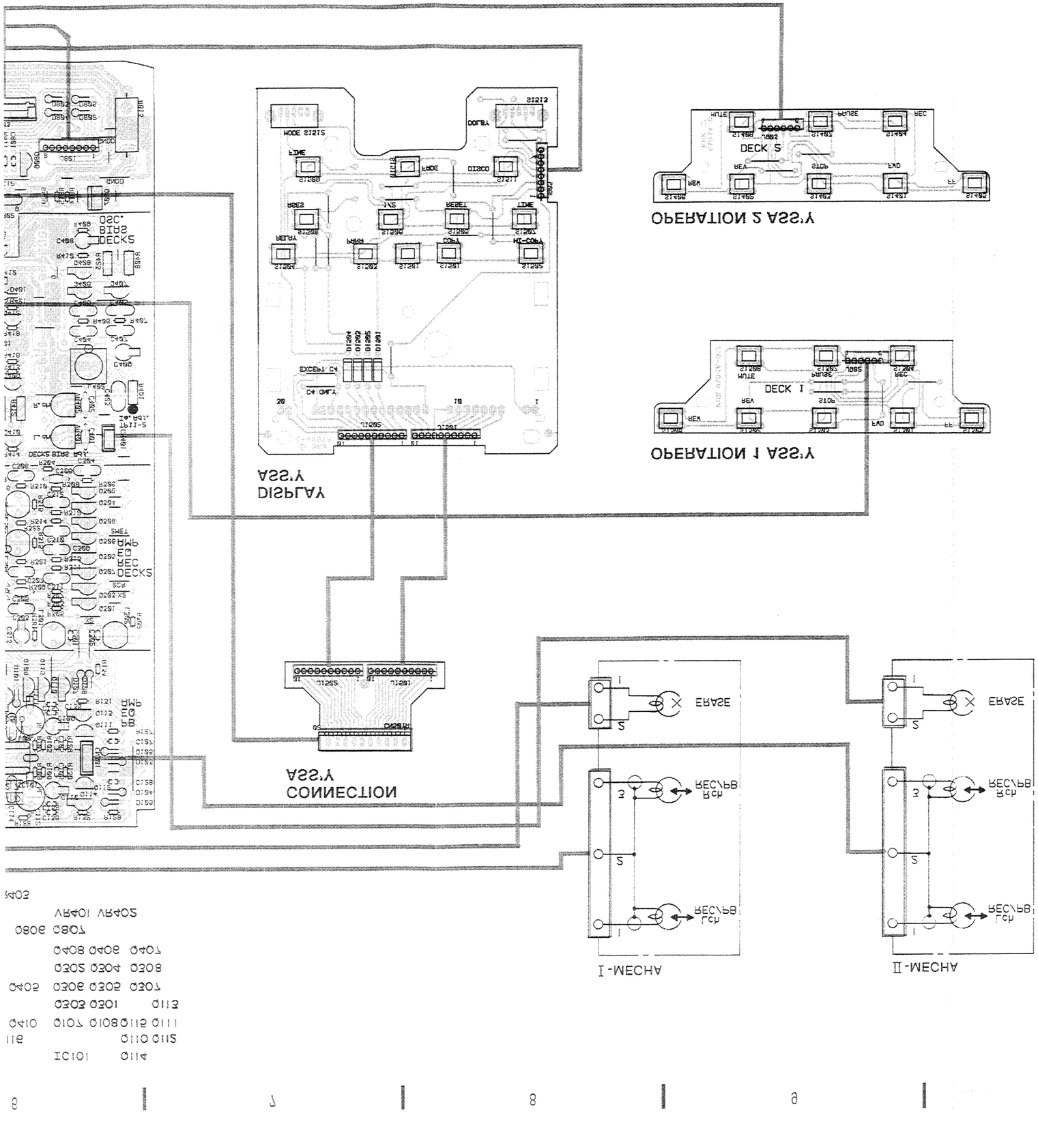


P.C.B. pattern diagram indication	Corresponding part symbol	Part name	P.C.B. pattern diagram indication	Corresponding part symbol	Part name
		Transistor			Ceramic capacitor
		FET			Mylar capacitor
					Styrol capacitor
		Diode			Electrolytic capacitor (Non polarized)
					Electrolytic capacitor (Noiseless)
		Zenner diode			Electrolytic capacitor (Polarized)
					Electrolytic capacitor (Polarized)
		LED			Power capacitor
		Varactor			Semi-fixed resistor
		Tact switch			Resistor array
					Resistor
		Inductor			
		Coil			Resonator
		Transformer			Thermister
		Filter			

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the above Table.
3. The capacitor terminal marked with ▭ shows negative terminal.
4. The diode marked with ⊐ shows cathode side.
5. The transistor terminal marked with ▭ shows emitter.

CT-Z460WR

• View from soldering side



MAIN ASS'Y

TRANSISTOR B ASS'Y

VR ASS'Y

TRANSISTOR A ASS'Y

TO AMP (A-Z460)

I-MECHA

II-MECHA

R-REC
F-REC
F/R
PACK
CLOS
METAL
SOL
RM
CM

9. FOR CT-Z360WR/ZEBM TYPE

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

• Contrast of Miscellaneous Parts

The CT-Z360WR/ZEBM type is the same as CT-Z560WR/ZEBM type with the exception of the following sections.

Mark	Symbol of Description	Parts No.		Remarks
		CT-Z560WR	CT-Z360WR	
	Main Ass'y	Non supply	Non supply	
	HX Ass'y	Non supply	-----	
	Display Ass'y	Non supply	Non supply	
	Operation 1 Ass'y	Non supply	Non supply	
	Knob (MODE)	RAC1380	RAC1468	
	Knob (COPY)	RAC1467	RAC1472	
	Door panel (L) Ass'y	RXX1257	RXX1255	
	Door panel (R)	RAH1579	RAH1584	
	Front panel	RAH1674	RAH1675	
	FL Lens	RLP1033	RLP1032	
	Mechanism unit (Deck I)	Non supply	Non supply	That for Deck II is the same.
	Connector ass'y 3P	-----	RKP1322	
	Packing case	RHG1157	RHG1155	

• Mechanism Unit (Deck I)

- Mechanism unit (Deck I) on the CT-Z360WR/ZEBM is the same as mechanism unit (Deck I) on the CT-Z560WR/ZEBM with the exception of the following sections.
- Deck I on the CT-Z360WR/ZEBM has not a recording function.

Mark	Symbol of Description	Parts No.		Remarks
		CT-Z560WR	CT-Z360WR	
	Connector (3P)	------	Non supply	
	Conenctor (5P)	Non supply	Non supply	
	Connector (8P)	Non supply	------	
	Metal detector lever (L)	RNK1529	------	
	Head PCB R/P	Non supply	------	
	Head PCB PB	------	Non supply	
	HD FPC (R/P)	RNP1232	------	
	HD FPC (PB)	------	RNP1235	
	Head R/P E	RPB1030	------	
	Head PB	------	RPB1031	

• P.C.B's PARTS LIST FOR CT-Z360WR

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

Mark	No.	Description	Parts No.
VR ASS'Y			
RESISTOR			
	VR1201	VARIABLE RESISTOR (100KB)	RCS1012
TR A ASS'Y			
SEMICONDUCTOR			
⚠	IC1002	REGULATOR IC	NJM7812FA
TR B ASS'Y			
SEMICONDUCTOR			
⚠	IC1003	REGULATOR IC	NJM7812FA
OPERATION 1 ASS'Y			
SWITCHES			
	S1301-S1303	TACT SWITCH (FWD, REV, STOP, TACT SWITCH FF, REW)	RSG-155
OPERATION 2 ASS'Y			
SWITCHES			
	S1401-S1408	TACT SWITCH (FWD, REV, STOP, REC, FF, REW, PAUSE, MUTE)	RSG-155
CONNECTION ASS'Y			
OTHERS			
	CN501	CONNECTOR 20P	BTEM20P-1R
MAIN ASS'Y			
SEMICONDUCTORS			
⚠	IC1001	REGULATOR IC	NJM78M05FA
	IC101	PB-EQ AMP IC	CXA1115BP
	IC201	DOLBY-B,C IC	CX20187
	IC301, IC501	OP-AMP IC	M5218P
	IC502	COMPARATOR	M5233P
	IC701	VCA IC	M51131L
	IC761	IC	BA335
	IC801, IC851	IC	BA6218
	IC901	CPU	PD3150A
	Q101, Q102	TRANSISTOR	DTC124ES
	Q103-Q106	TRANSISTOR	DTC114ES
	Q107-Q109	TRANSISTOR	DTC124ES
	Q110	TRANSISTOR	DTA124ES
	Q111, Q112	N-FET	2SK373
	Q113, Q114	TRANSISTOR	2SC3311A
	Q115, Q116	TRANSISTOR	DTC124ES
	Q201	TRANSISTOR	DTC124ES
	Q202	TRANSISTOR	DTA124ES
	Q301-Q308	TRANSISTOR	DTC114TS
	Q309, Q310	TRANSISTOR	2SD1302
	Q401	TRANSISTOR	DTC124ES
	Q402	TRANSISTOR	DTA124ES
	Q403	TRANSISTOR	DTC124ES
	Q404, Q405	TRANSISTOR	2SC3311A
	Q406-Q408	TRANSISTOR	2SC3243
	Q409-Q411	TRANSISTOR	2SA1283
	Q412	TRANSISTOR	2SC3311A
	Q413	TRANSISTOR	2SC3243
	Q414, Q415	TRANSISTOR	2SC3311A
	Q502	TRANSISTOR	2SA1309A
	Q503	TRANSISTOR	DTC124ES
	Q504	N-FET	2SK373
	Q507	TRANSISTOR	DTC114ES
	Q704	TRANSISTOR	DTC124ES
	Q706	TRANSISTOR	2SC3311A
	Q710	TRANSISTOR	DTC114ES
	Q711, Q712	TRANSISTOR	2SD1302
	Q713	TRANSISTOR	DTA124ES
	Q714	TRANSISTOR	2SC3311A
	Q715	TRANSISTOR	DTA124ES
	Q761	TRANSISTOR	2SC3311A
	Q801-Q803	TRANSISTOR	2SC3246
	Q804	TRANSISTOR	2SA1309A
	Q805	TRANSISTOR	DTC124ES
	Q806	TRANSISTOR	2SC3311A
	Q807	TRANSISTOR	2SD1266
	Q808	TRANSISTOR	2SC3311A
	Q851-Q853	TRANSISTOR	2SC3246
	Q854	TRANSISTOR	2SA1309A
	Q855	TRANSISTOR	DTC124ES
	Q856	TRANSISTOR	2SC3311A
	Q857	TRANSISTOR	2SD1266
	Q858	TRANSISTOR	2SC3311A
	Q901-Q904	TRANSISTOR	2SC3311A
	Q905-Q908	TRANSISTOR	DTC124ES
⚠	D1001	ZENER DIODE	MTZ5.6B
	D1002	DIODE	1SR35-100A
	D101-D108	DIODE	1SS254
	D201, D202	DIODE	1SS254
	D401	DIODE	MTZ9.1B
	D501-D510	DIODE	1SS254
⚠	D511	ZENER DIODE	MTZ5.1B
	D512	DIODE	1SS254
	D701-D703	DIODE	1SS254
	D801	DIODE	1SS252
	D802-D806	DIODE	1SS254
	D851	DIODE	1SS252
	D854-D856	DIODE	1SS254
	D901, D902	DIODE	1SS254
	D906	DIODE	1SS254
	D910-D914	DIODE	1SS254
	D921, D990	DIODE	1SS254
	D999	DIODE	1SS254
COILS AND FILTERS			
	L101, L102	COIL	RTF1099
	L201, L202	COIL	RTF1005
	L301, L302	COIL	RTF1102
	L303, L304	COIL	RTF1103
	L401	COIL	RTF1061
	L402	COIL	RTD1043
	F201, F202	MPX FILTER	RTF1059
CAPACITORS			
	C1001	ELECTR. CAPACITOR	CEAS471M25
	C1002	ELECTR. CAPACITOR	CEAS221M16
	C1003	CERAMIC CAPACITOR	CKCYF103Z50
	C1004	ELECTR. CAPACITOR	CEAS101M25
	C1005	ELECTR. CAPACITOR	CEAS221M16
	C1006	CERAMIC CAPACITOR	CKCYF103Z50
	C1007	ELECTR. CAPACITOR	CEAS222M25
	C1008	ELECTR. CAPACITOR	CEAS470M16
	C1009	CERAMIC CAPACITOR	CKCYF103Z50
	C1010	ELECTR. CAPACITOR	CEAS100M50
	C1011	ELECTR. CAPACITOR	CEAS470M16
	C1012	CERAMIC CAPACITOR	CKCYF103Z50
	C101, C102	AXIAL CERAMIC CAPACITOR	CKPUYB471K50
	C103, C104	AXIAL CERAMIC CAPACITOR	CKPUYB561K50
	C105, C106	AXIAL CERAMIC CAPACITOR	CKPUYB102K50
	C107-C110	ELECTR. CAPACITOR	CEANL100M16
	C111, C112	ELECTR. CAPACITOR	CEANL101M10
	C113, C114	AUDIO FILM CAPACITOR	CFTXA822J50
	C117, C118	ELECTR. CAPACITOR	CEAS4R7M50
	C119, C120	AUDIO FILM CAPACITOR	CFTXA223J50
	C121, C122	AXIAL CERAMIC CAPACITOR	CKPUYB221K50
	C123, C124	AXIAL CERAMIC CAPACITOR	CKPUYB391K50
	C127, C128	AXIAL CERAMIC CAPACITOR	CCPUSL100J50
	C131, C132	ELECTR. CAPACITOR	CEAS470M16
	C133, C134	AXIAL CERAMIC CAPACITOR	CKPUYB681K50
	C135-C138	AXIAL CERAMIC CAPACITOR	CKPUYB101K50
	C150	SERAMIC CAPACITOR	CKCYF103Z50
	C201-C204	ELECTR. CAPACITOR	CEAS010M50
	C205, C206	ELECTR. CAPACITOR	CEAS100M50
	C207, C208	ELECTR. CAPACITOR	CEAS010M50
	C209, C210	ELECTR. CAPACITOR	CEAS331M16
	C211, C212	AXIAL CERAMIC CAPACITOR	CKPUYB681K50
	C213, C214	AUDIO FILM CAPACITOR	CFTXA332J50
	C215, C216	AUDIO FILM CAPACITOR	CFTXA472J50
	C217, C218	ELECTR. CAPACITOR	CEASR47M50
	C219, C220	ELECTR. CAPACITOR	CEASR15M50
	C221, C222	CERAMIC CAPACITOR	CGCYX153K25
	C223, C224	ELECTR. CAPACITOR	CEASR22M50
	C225, C226	CERAMIC CAPACITOR	CGCYX683K25
	C227, C228	CERAMIC CAPACITOR	CGCYX473K25
	C229, C230	AUDIO FILM CAPACITOR	CFTXA682J50
	C231, C232	AUDIO FILM CAPACITOR	CFTXA103J50
	C233-C236	ELECTR. CAPACITOR	CEAS4R7M50
	C237	ELECTR. CAPACITOR	CEAS470M16
	C301, C302	AXIAL CERAMIC CAPACITOR	CKPUYB221K50
	C303, C304	AUDIO FILM CAPACITOR	CFTXA472J50
	C305, C306	CERAMIC CAPACITOR	CGCYX153K25
	C307, C308	AUDIO FILM CAPACITOR	CFTXA223J50
	C309, C310	AUDIO FILM CAPACITOR	CFTXA272J50
	C311, C312	AUDIO FILM CAPACITOR	CFTXA472J50
	C313, C314	ELECTR. CAPACITOR	CEAS4R7M50
	C315, C316	ELECTR. CAPACITOR	CEASR15M50
	C317, C318	ELECTR. CAPACITOR	CEAS100M50
	C319, C320	AUDIO FILM CAPACITOR	CFTXA222J50
	C321	ELECTR. CAPACITOR	CEAS470M16

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Therefore, when

is shown by J =

Parts No.
M51131L
BA335
BA6218
PD3150A
DTC124ES
DTC114ES
DTC124ES
DTA124ES
2SK373
2SC3311A
DTC124ES
DTC124ES
DTA124ES
DTC114TS
2SD1302
DTC124ES
DTA124ES
DTC124ES
2SC3311A
2SC3243
2SA1283
2SC3311A
2SC3243
2SC3311A
2SA1309A
DTC124ES
2SK373
DTC114ES
DTC124ES
2SC3311A
DTC114ES
2SD1302
DTA124ES
2SC3311A
DTA124ES

Mark	No.	Description	Parts No.
	Q761	TRANSISTOR	2SC3311A
	Q801-Q803	TRANSISTOR	2SC3246
	Q804	TRANSISTOR	2SA1309A
	Q805	TRANSISTOR	DTC124ES
	Q806	TRANSISTOR	2SC3311A
	Q807	TRANSISTOR	2SD1266
	Q808	TRANSISTOR	2SC3311A
	Q851-Q853	TRANSISTOR	2SC3246
	Q854	TRANSISTOR	2SA1309A
	Q855	TRANSISTOR	DTC124ES
	Q856	TRANSISTOR	2SC3311A
	Q857	TRANSISTOR	2SD1266
	Q858	TRANSISTOR	2SC3311A
	Q901-Q904	TRANSISTOR	2SC3311A
	Q905-Q908	TRANSISTOR	DTC124ES
⚠	D1001	ZENER DIODE	MTZ5.6B
	D1002	DIODE	1SR35-100A
	D101-D108	DIODE	1SS254
	D201, D202	DIODE	1SS254
	D401	DIODE	MTZ9.1B
	D501-D510	DIODE	1SS254
⚠	D511	ZENER DIODE	MTZ5.1B
	D512	DIODE	1SS254
	D701-D703	DIODE	1SS254
	D801	DIODE	1SS252
	D802-D806	DIODE	1SS254
	D851	DIODE	1SS252
	D854-D856	DIODE	1SS254
	D901, D902	DIODE	1SS254
	D906	DIODE	1SS254
	D910-D914	DIODE	1SS254
	D921, D990	DIODE	1SS254
	D999	DIODE	1SS254

COILS AND FILTERS

L101, L102	COIL	RTF1099
L201, L202	COIL	RTF1005
L301, L302	COIL	RTF1102
L303, L304	COIL	RTF1103
L401	COIL	RTF1061
L402	COIL	RTD1043
F201, F202	MPX FILTER	RTF1059

CAPACITORS

C1001	ELECTR. CAPACITOR	CEAS471M25
C1002	ELECTR. CAPACITOR	CEAS221M16
C1003	CERAMIC CAPACITOR	CKCYF103Z50
C1004	ELECTR. CAPACITOR	CEAS101M25
C1005	ELECTR. CAPACITOR	CEAS221M16
C1006	CERAMIC CAPACITOR	CKCYF103Z50
C1007	ELECTR. CAPACITOR	CEAS222M25
C1008	ELECTR. CAPACITOR	CEAS470M16
C1009	CERAMIC CAPACITOR	CKCYF103Z50
C1010	ELECTR. CAPACITOR	CEAS100M50

Mark	No.	Description	Parts No.
	C1011	ELECTR. CAPACITOR	CEAS470M16
	C1012	CERAMIC CAPACITOR	CKCYF103Z50
	C101, C102	AXIAL CERAMIC CAPACITOR	CKPUYB471K50
	C103, C104	AXIAL CERAMIC CAPACITOR	CKPUYB561K50
	C105, C106	AXIAL CERAMIC CAPACITOR	CKPUYB102K50
	C107-C110	ELECTR. CAPACITOR	CEANL100M16
	C111, C112	ELECTR. CAPACITOR	CEANL101M10
	C113, C114	AUDIO FILM CAPACITOR	CFTXA822J50
	C117, C118	ELECTR. CAPACITOR	CEAS4R7M50
	C119, C120	AUDIO FILM CAPACITOR	CFTXA223J50
	C121, C122	AXIAL CERAMIC CAPACITOR	CKPUYB221K50
	C123, C124	AXIAL CERAMIC CAPACITOR	CKPUYB391K50
	C127, C128	AXIAL CERAMIC CAPACITOR	CCPUSL100J50
	C131, C132	ELECTR. CAPACITOR	CEAS470M16
	C133, C134	AXIAL CERAMIC CAPACITOR	CKPUYB681K50
	C135-C138	AXIAL CERAMIC CAPACITOR	CKPUYB101K50
	C150	SERAMIC CAPACITOR	CKCYF103Z50
	C201-C204	ELECTR. CAPACITOR	CEAS010M50
	C205, C206	ELECTR. CAPACITOR	CEAS100M50
	C207, C208	ELECTR. CAPACITOR	CEAS010M50
	C209, C210	ELECTR. CAPACITOR	CEAS331M16
	C211, C212	AXIAL CERAMIC CAPACITOR	CKPUYB681K50
	C213, C214	AUDIO FILM CAPACITOR	CFTXA332J50
	C215, C216	AUDIO FILM CAPACITOR	CFTXA472J50
	C217, C218	ELECTR. CAPACITOR	CEASR47M50
	C219, C220	ELECTR. CAPACITOR	CEASR15M50
	C221, C222	CERAMIC CAPACITOR	CGCYX153K25
	C223, C224	ELECTR. CAPACITOR	CEASR22M50
	C225, C226	CERAMIC CAPACITOR	CGCYX683K25
	C227, C228	CERAMIC CAPACITOR	CGCYX473K25
	C229, C230	AUDIO FILM CAPACITOR	CFTXA682J50
	C231, C232	AUDIO FILM CAPACITOR	CFTXA103J50
	C233-C236	ELECTR. CAPACITOR	CEAS4R7M50
	C237	ELECTR. CAPACITOR	CEAS470M16
	C301, C302	AXIAL CERAMIC CAPACITOR	CKPUYB221K50
	C303, C304	AUDIO FILM CAPACITOR	CFTXA472J50
	C305, C306	CERAMIC CAPACITOR	CGCYX153K25
	C307, C308	AUDIO FILM CAPACITOR	CFTXA223J50
	C309, C310	AUDIO FILM CAPACITOR	CFTXA272J50
	C311, C312	AUDIO FILM CAPACITOR	CFTXA472J50
	C313, C314	ELECTR. CAPACITOR	CEAS4R7M50
	C315, C316	ELECTR. CAPACITOR	CEASR15M50
	C317, C318	ELECTR. CAPACITOR	CEAS100M50
	C319, C320	AUDIO FILM CAPACITOR	CFTXA222J50
	C321	ELECTR. CAPACITOR	CEAS470M16

Mark	No.	Description	Parts No.
	C322	ELECTR. CAPACITOR	CEAS010M50
	C323	ELECTR. CAPACITOR	CEAS470M16
	C325, C326	ELECTR. CAPACITOR	CEAS010M50
	C401, C402	CERAMIC CAPACITOR	CCCSL221K500
	C403	CAPACITOR	CQPA752J100
	C404	AUDIO FILM CAPACITOR	CFTXA223J50
	C405	AUDIO FILM CAPACITOR	CFTXA472J50
	C406, C407	AUDIO FILM CAPACITOR	CFTXA332J50
	C408, C409	ELECTR. CAPACITOR	CEAS470M16
	C410	ELECTR. CAPACITOR	CEAS221M16
	C501, C502	CERAMIC CAPACITOR	CGCYX683K25
	C503, C504	ELECTR. CAPACITOR	CEAS470M16
	C505, C506	ELECTR. CAPACITOR	CEASR47M50
	C509	ELECTR. CAPACITOR	CEAS470M16
	C511, C512	ELECTR. CAPACITOR	CEAS010M50
	C513	AXIAL CERAMIC CAPACITOR	CKPUYB471K50
	C701, C702	ELECTR. CAPACITOR	CEAS100M50
	C703	ELECTR. CAPACITOR	CEAS470M16
	C705, C706	ELECTR. CAPACITOR	CEAS470M16
	C707	ELECTR. CAPACITOR	CEAS4R7M50
	C711-C713	CERAMIC CAPACITOR	CKCYF103Z50
	C715, C716	CERAMIC CAPACITOR	CKCYF103Z50
	C717, C718	CERAMIC CAPACITOR	CGCYX104K25
	C761	CERAMIC CAPACITOR	CGCYX473K25
	C762, C763	CERAMIC CAPACITOR	CGCYX104K25
	C764	ELECTR. CAPACITOR	CEASR47M50
	C801	AXIAL CERAMIC CAPACITOR	CKPUYY103M16
	C802	CERAMIC CAPACITOR	CGCYX104K25
	C851	AXIAL CERAMIC CAPACITOR	CKPUYY103M16
	C852	CERAMIC CAPACITOR	CGCYX104K25
	C901	CERAMIC CAPACITOR	CKCYF103Z50
	C902	ELECTR. CAPACITOR	CEAS470M16
	C903	CERAMIC CAPACITOR	CKCYF103Z50
	C905	ELECTR. CAPACITOR	CEAS4R7M50
	C906	CERAMIC CAPACITOR	CKCYF103Z50
	C907	ELECTR. CAPACITOR	CEAS100M50
	C908	CERAMIC CAPACITOR	CKCYF103Z50
	C909, C910	CERAMIC CAPACITOR	CKCYB102K50
	C911	AXIAL CERAMIC CAPACITOR	CKPUYB102K50

Mark	No.	Description	Parts No.
RESISTORS			
	VR101-VR104	SEMI-FIXED (22K)	VRTB6VS223
	VR301, VR302	SEMI-FIXED (22K)	VRTB6VS223
	VR401, VR402	SEMI-FIXED (100K)	VRTB6VS104
	VR403	METAL GLAZE SEMI-FIXED (100)	RCP-031
	VR801	SEMI-FIXED (22K)	VRTG6VS223
	VR802	SEMI-FIXED (10K)	VRTS6VS103
	VR851	SEMI-FIXED (22K)	VRTG6VS223
	R401, R408, R411, R412, R423		RD1/2LF□□□J
	R802	METAL OXIDE	RS2LMF200J
	R812		RD1/4LF222J
	R813	METAL OXIDE	RS3LMF101J
	R852	METAL OXIDE	RS2LMF200J
	R862		RD1/4LF222J
	R863	METAL OXIDE	RS3LMF101J
	R901	RESISTOR ARRAY	RA12T104J
	R905	RESISTOR ARRAY	RA5T104J
	R910	RESISTOR ARRAY	RA6T223J
	OTHER RESISTORS		RD1/6PM□□□J
OTHERS			
	CN501	CONNECTOR (20P)	BTEM20S-1S
	X901	CERAMIC RESONATOR	VSS1014

DISPLAY ASS'Y

SEMICONDUCTORS

D1501-D1504	DIODE	1SS254

SWITCHES

S1501, S1502	TACT SWITCH (X1, X2)	RSG1009
S1504-S1507	TACT SWITCH (RELAY, RESET, 1/2, TIME)	RSG1009
S1509-S1511	TACT SWITCH (NORM, RADE, DISCO)	RSG1009
S1512, S1513	SLIDE SWITCH (REVERSE MODE, DOLBY NR)	RSH1019

OTHERS

	FL TUBE	RAW1042

10. SCHEMATIC DIAGRAM FOR CT-Z360WR

1. RESISTORS :
Indicated in Ω, 1/4W, 1/6W, ±5% tolerance unless otherwise noted k ; kΩ, M ; MΩ, (F) ; ±1%, (G) ; ±2%, (K) ; ±10%, (M) ; ±20% tolerance.

2. CAPACITORS :
Indicated in capacity (μ F) /voltage (V) unless otherwise noted p ; pF.Indication without voltage is 50V except electolytic capacitor.

3. VOLTAGE CURRENT :
□ : DC voltage (V) at no input signal.

4. OTHERS
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
✱ marked capacitors and resistors have parts numbers.

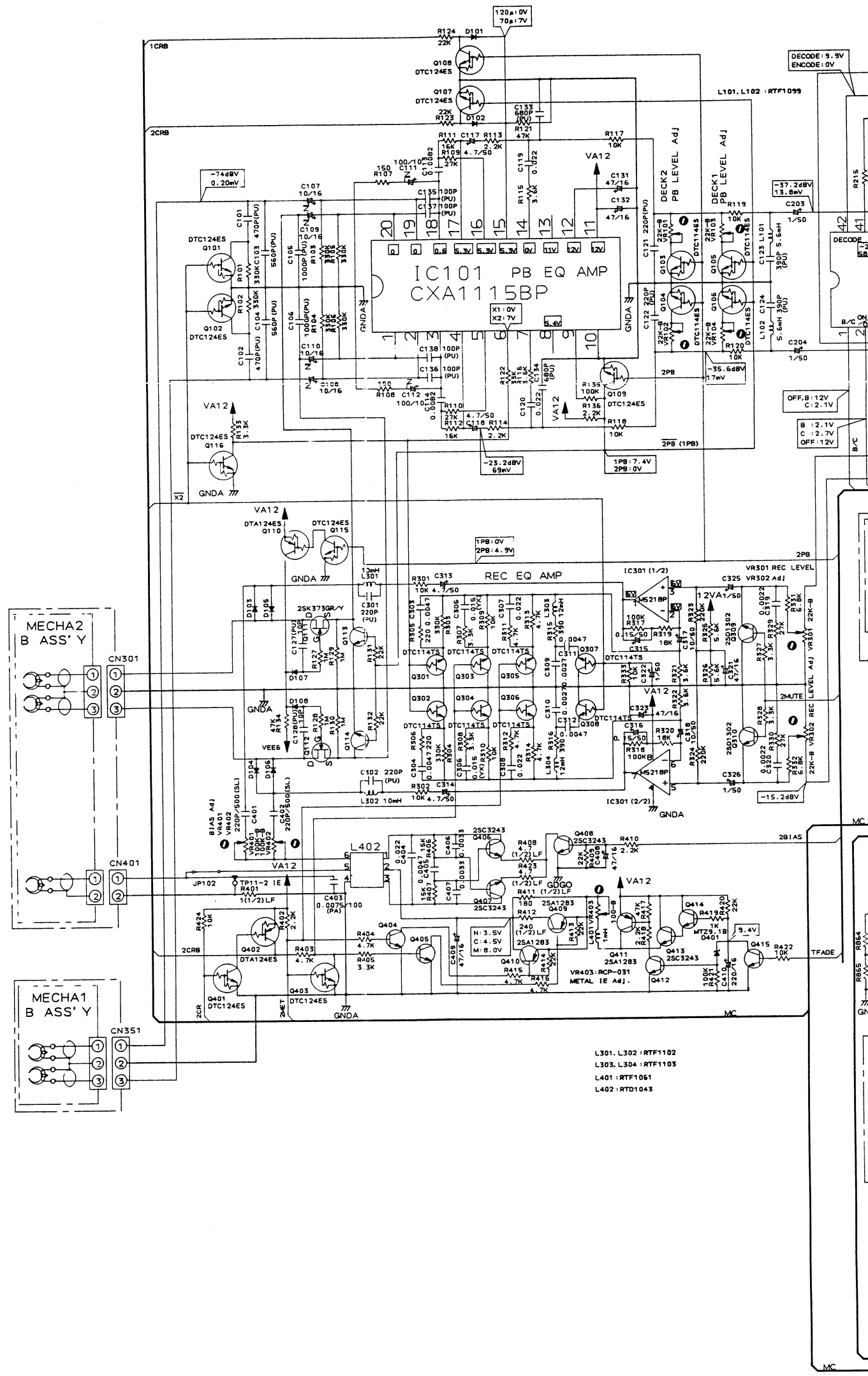
This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITHES (Underline indicates switch position.)

DISPLAY UNIT
- S1501: X1 COPY
- S1502: X2 COPY
- S1504: RELAY/SKIP
- S1505: RESET
- S1506: 1/2 (Counter I mecha/II mecha select SW
- S1507: TIME
- S1509: NORM (FINE)
- S1510: FADE
- S1511: DISCO
- S1512: REVERSE MODE
- S1513: DOLBY MODE

OPERATE1 UNIT
- S1301: FWD ▷
- S1302: REV ◁
- S1303: STOP □
- S1305: FF ▶▶
- S1306: REW ◀◀

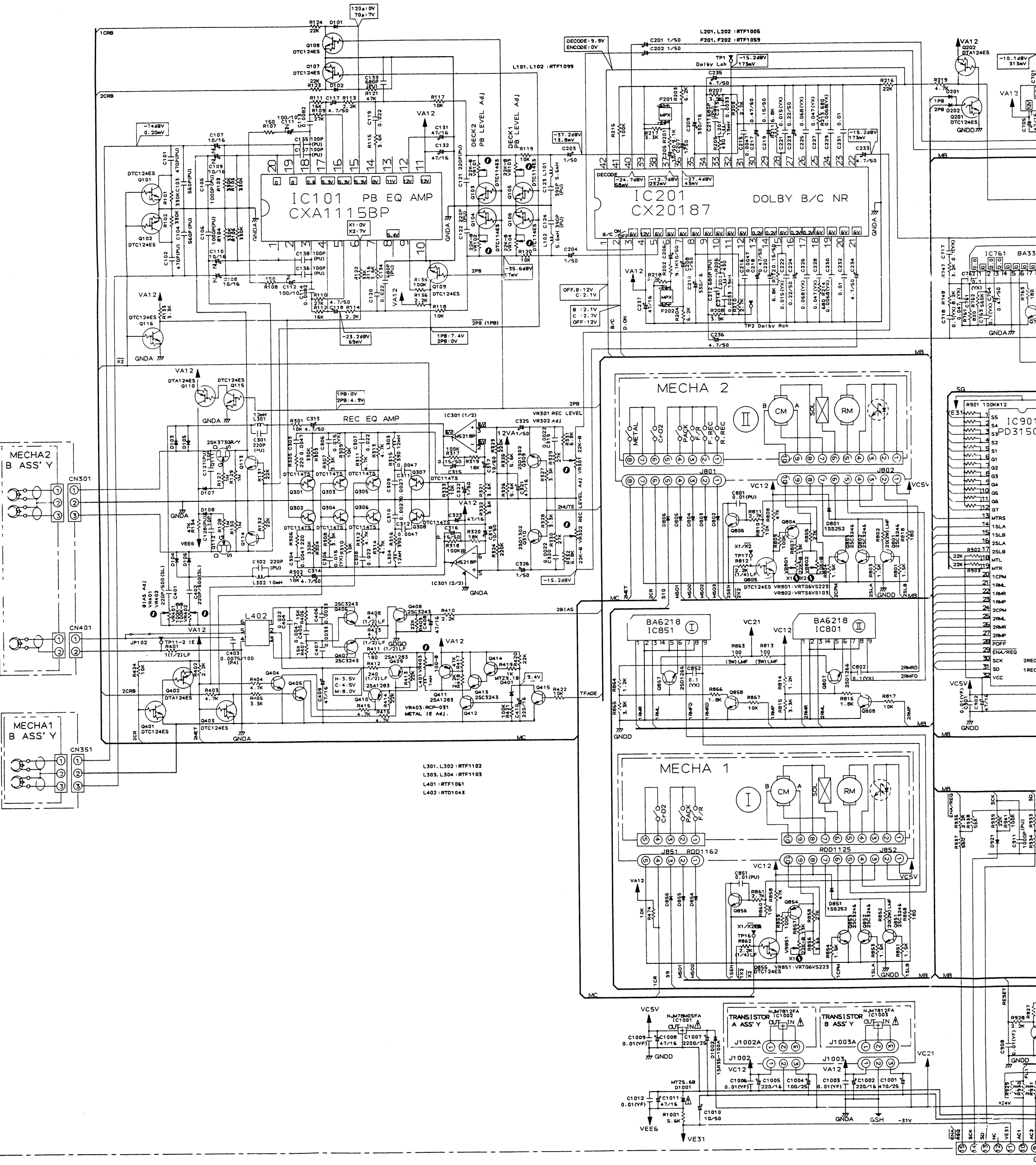
OPERATE2 UNIT
- S1401: FWD ▷
- S1402: REV ◁
- S1403: STOP □
- S1404: REC ●
- S1405: FF ▶▶
- S1406: REW ◀◀
- S1407: PAUSE □□
- S1408: MUTE ⊘



NOTE : If the parts are not identified in the diagram, the followings are used.

NPN 2SC3311A
PNP 2SA1309A
1SS254
VRTB6VS

R CT-Z360WR



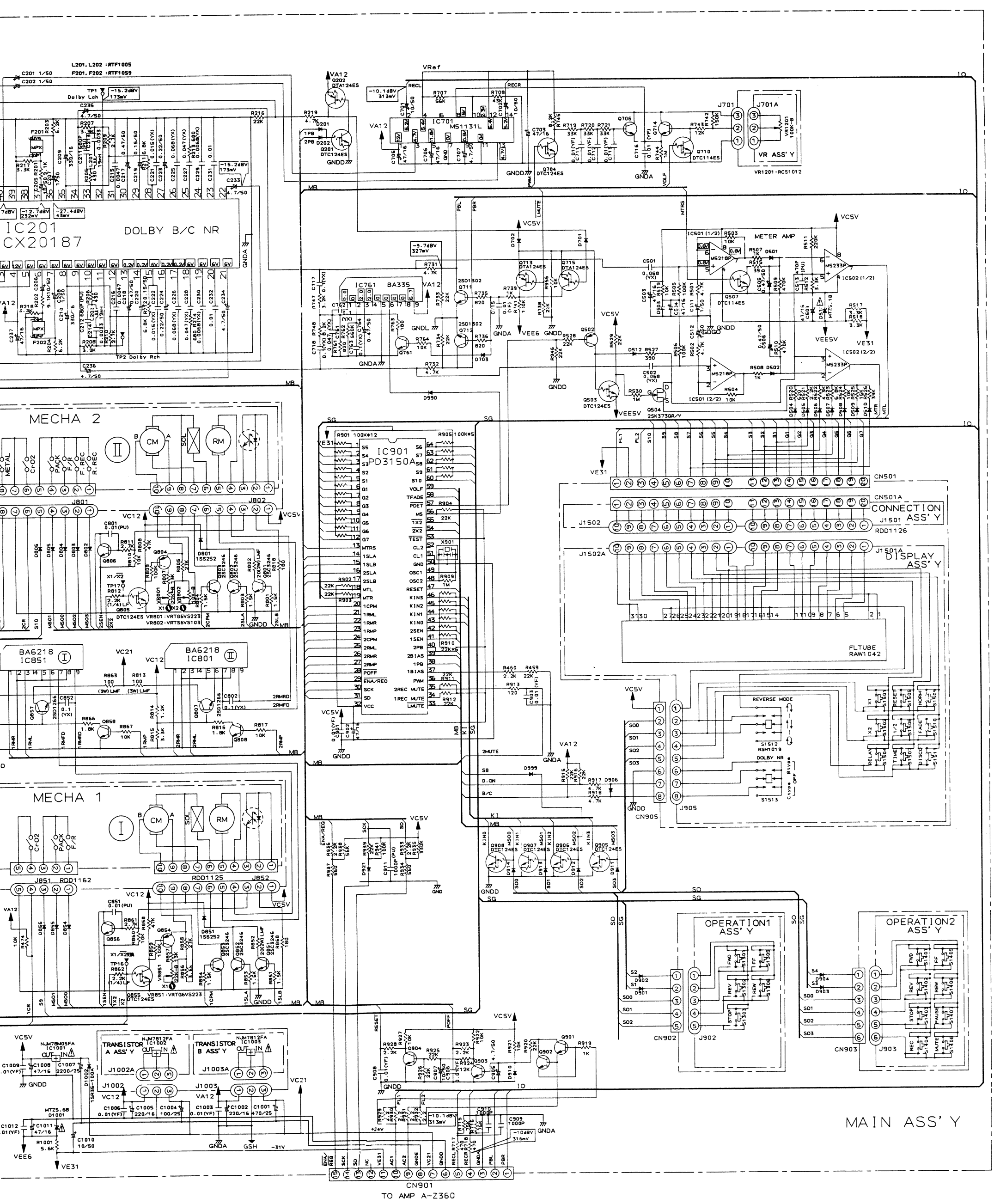
NOTE: If the parts are not identified in the diagram, the followings are used.

NPN 2SC3311A

PNP 2SA1309A

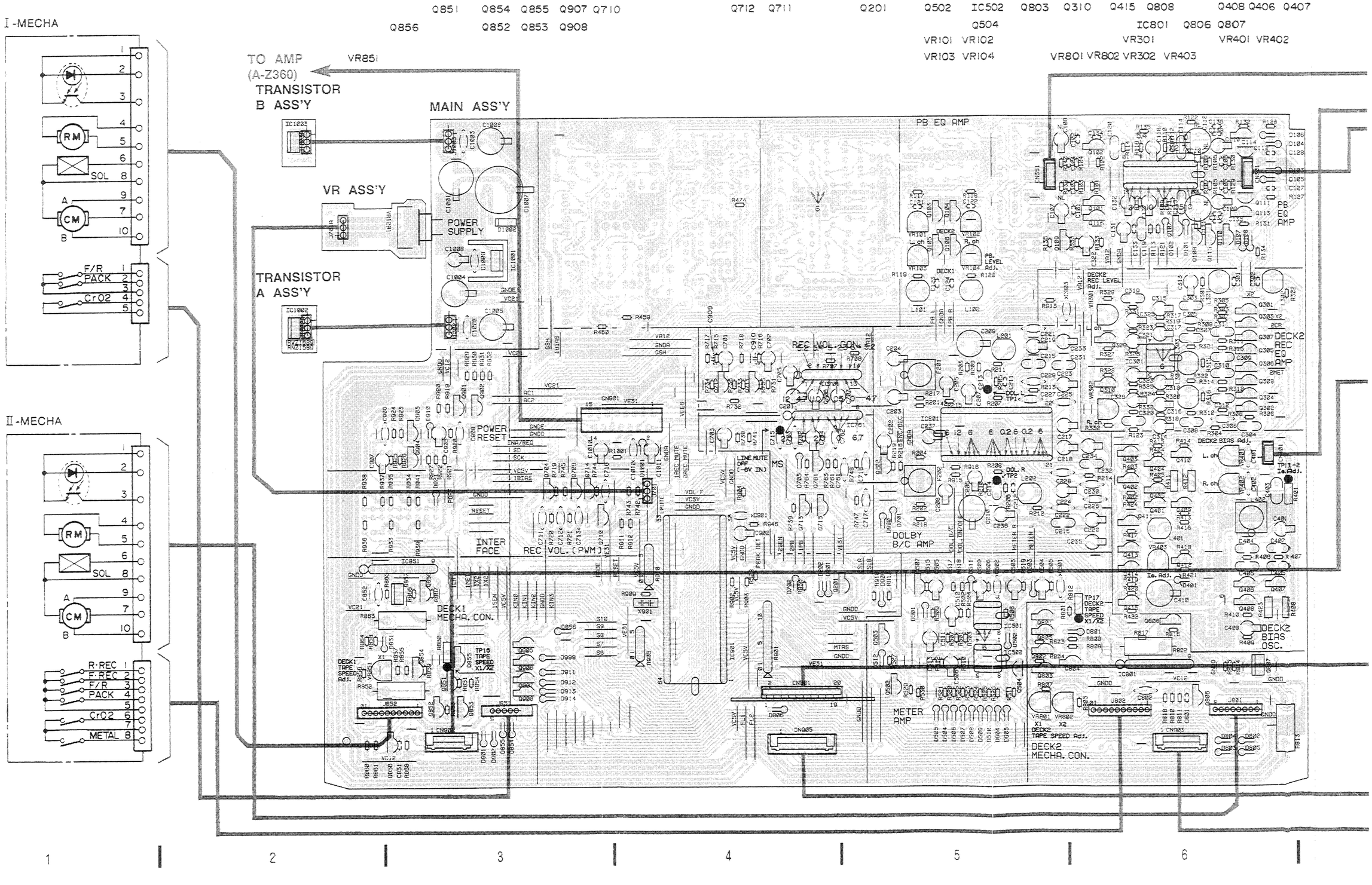
1SS254

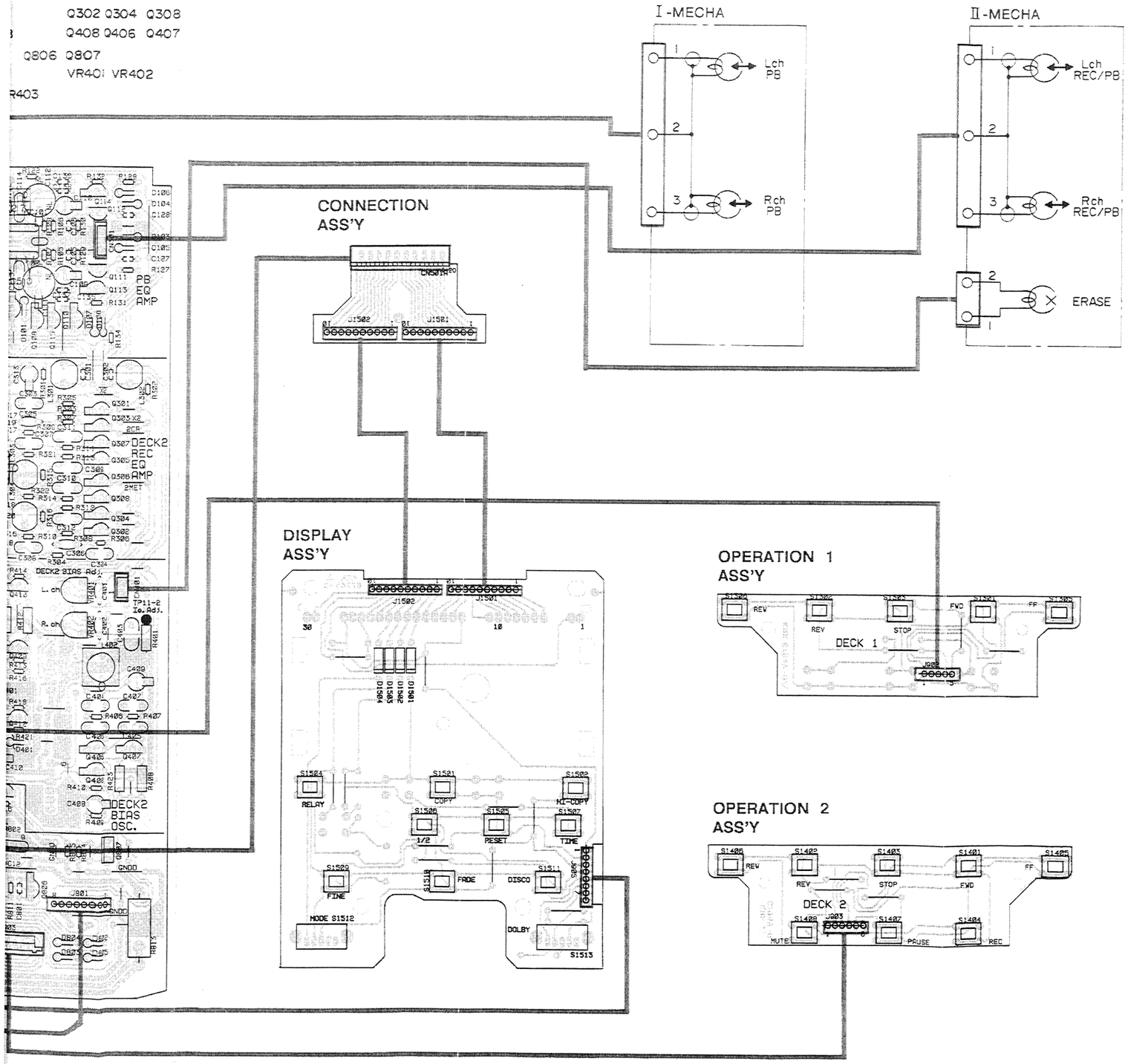
VRTB6VS


L201, L202 : RTF1005
F201, F202 : RTF1059
IC201
CX20187
DOLBY B/C NR
MECHA 2
MECHA 1
IC901
PD3150A
IC701
M51131L
BA6218
IC851
IC801
IC761
BA335
METER AMP
CONNECTION ASS' Y
DISPLAY ASS' Y
FLTUBE
RAW1042
REVERSE MODE
DOLBY NR
OPERATION1 ASS' Y
OPERATION2 ASS' Y
TRANSISTOR A ASS' Y
TRANSISTOR B ASS' Y
MAIN ASS' Y
CN901
TO AMP A-Z360

11. P.C. BOARDS CONNECTION DIAGRAM FOR CT-Z360WR

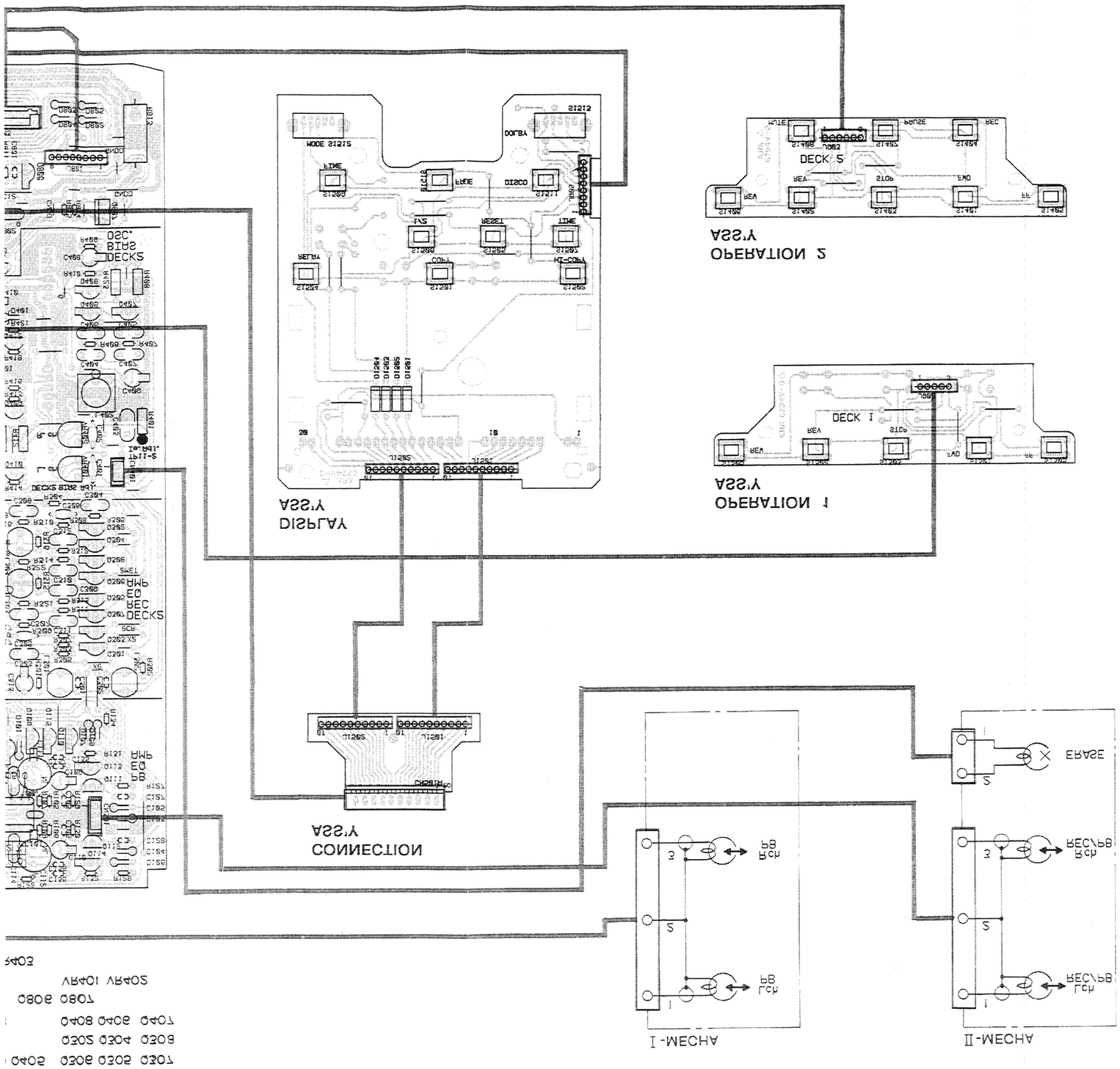
- View from component side



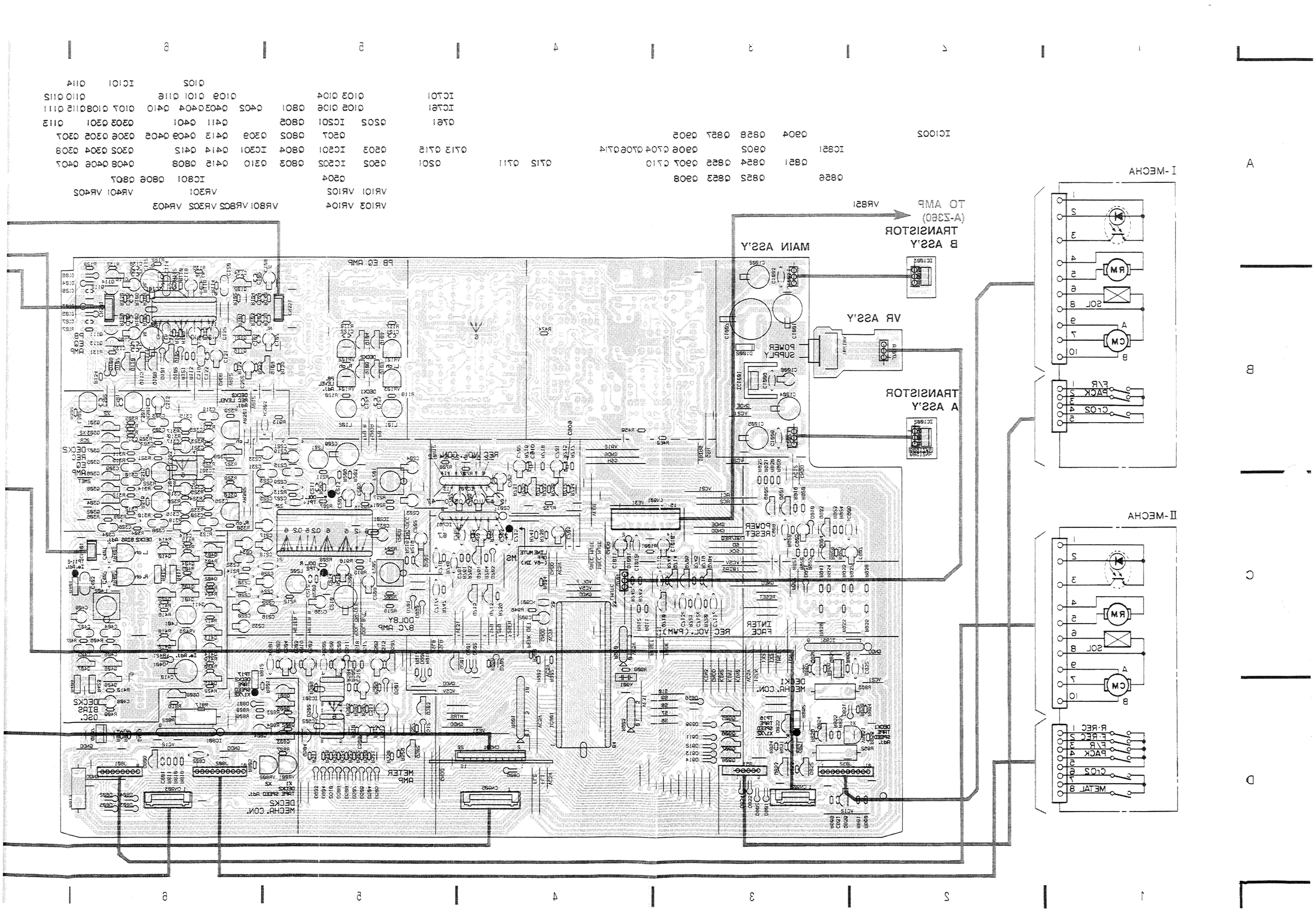


P.C.B. pattern diagram indication	Corresponding part symbol	Part name	P.C.B. pattern diagram indication	Corresponding part symbol	Part name
		Transistor			Ceramic capacitor
		FET			Mylar capacitor
					Styrol capacitor
		Diode			Electrolytic capacitor (Non polarized)
					Electrolytic capacitor (Noiseless)
		Zenner diode			Electrolytic capacitor (Polarized)
					Electrolytic capacitor (Polarized)
		LED			Power capacitor
		Varactor			Semi-fixed resistor
		Tact switch			Resistor array
		Inductor			Resistor
		Coil			Resonator
		Transformer			Thermistor
		Filter			

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the above Table.
3. The capacitor terminal marked with ▭ shows negative terminal.
4. The diode marked with ○ shows cathode side.
5. The transistor terminal marked with ▭ shows emitter.



● View from soldering side


MAIN ASS'Y
TRANSISTOR B ASS'Y
TO AMP (A-2360)
VR ASS'Y
TRANSISTOR A ASS'Y
I-MECHA
II-MECHA
PB EQ AMP
REC EQ AMP
REC VOL. (PWM)
INTER FACE
POWER SUPPLY
POWER RESET
DECK1 MECHA. CON.
DECK2 MECHA. CON.
METER AMP
DOLBY B/C AMP
DECK2 BIAS OSC.
R-REC
F-REC
F/R
PACK
CLOZ
METAL

12. SPECIFICATIONS

Cassette Deck: CT-Z560WR

Systems ..... 4 track, 2-channel stereo
Heads ..... "Hard Permalloy" recording/playback head x 2
"Ferrite" erasing head x 2
Motor ..... DC servo capstan motor x 2
DC reel motor x 2
Wow and Flutter ..... No more than ±0.16 % (DIN)
Fast Winding Time ..... Approximately 90 seconds
(C-60 tape)
Frequency Response (– 20 dB recording):
Normal tape ..... 25 Hz to 16,000 Hz ±6 dB
CrO_2 tape ..... 25 Hz to 16,000 Hz ±6 dB
Metal tape ..... 25 Hz to 17,000 Hz ±6 dB
Signal-to-Noise ratio
Dolby NR OFF ..... 58 dB
Noise Reduction Effect
Dolby B type NR ON ..... More than 10 dB (at 5 kHz)
Dolby C type NR ON ..... More than 19 dB (at 5 kHz)
Harmonic Distortion ..... No more than 1.0% (0dB)

Miscellaneous
Dimensions ..... 360 (W) x 135 (H) x 325 (D) mm
Weight (without package) ..... 4.1 kg

Cassette Deck: CT-Z460WR

Systems ..... 4 track, 2-channel stereo
Heads ..... "Hard Permalloy" recording/playback head x 2
"Ferrite" erasing head x 2
Motor ..... DC servo capstan motor x 2
DC reel motor x 2
Wow and flutter ..... No more than ±0.16% (DIN)
Fast winding Time ..... Approximately 90 seconds
(C-60 tape)
Frequency Response (– 20 dB recording):
Normal tape ..... 25 Hz to 16,000 Hz ±6 dB
CrO_2 tape ..... 25 Hz to 16,000 Hz ±6 dB
Metal tape ..... 25 Hz to 17,000 Hz ±6 dB
Signal-to-Noise ratio
Dolby NR OFF ..... 58 dB
Noise Reduction Effect
Dolby B type NR ON ..... More than 10 dB (at 5 kHz)
Dolby C type NR ON ..... More than 19 dB (at 5 kHz)

Miscellaneous
Dimensions ..... 360 (W) x 135 (H) x 325 (D) mm
Weight (without package) ..... 4.1 kg

Cassette Deck: CT-Z360WR

Systems ..... 4 track, 2-channel stereo
Heads ..... "Hard Permalloy" playback head x 1
"Hard Permalloy" recording/playback head x 1
"Ferrite" erasing head x 1
Motor ..... DC servo capstan motor x 2
DC reel motor x 2
Wow and flutter ..... No more than ±0.17% (DIN)
Fast winding Time ..... Approximately 90 seconds
(C-60 tape)
Frequency Response
– 20 dB recording:
Normal tape ..... 25 Hz to 16,000 Hz ±6 dB
CrO_2 tape ..... 25 Hz to 16,000 Hz ±6 dB
Metal tape ..... 25 Hz to 17,000 Hz ±6 dB
Signal-to-Noise ratio
Dolby NR OFF ..... More than 58 dB
Noise Reduction Effect
Dolby B type NR ON ..... More than 10 dB (at 5 kHz)
Dolby C type NR ON ..... More than 19 dB (at 5 kHz)
Harmonic Distortion ..... No more than 1.0% (0 dB)

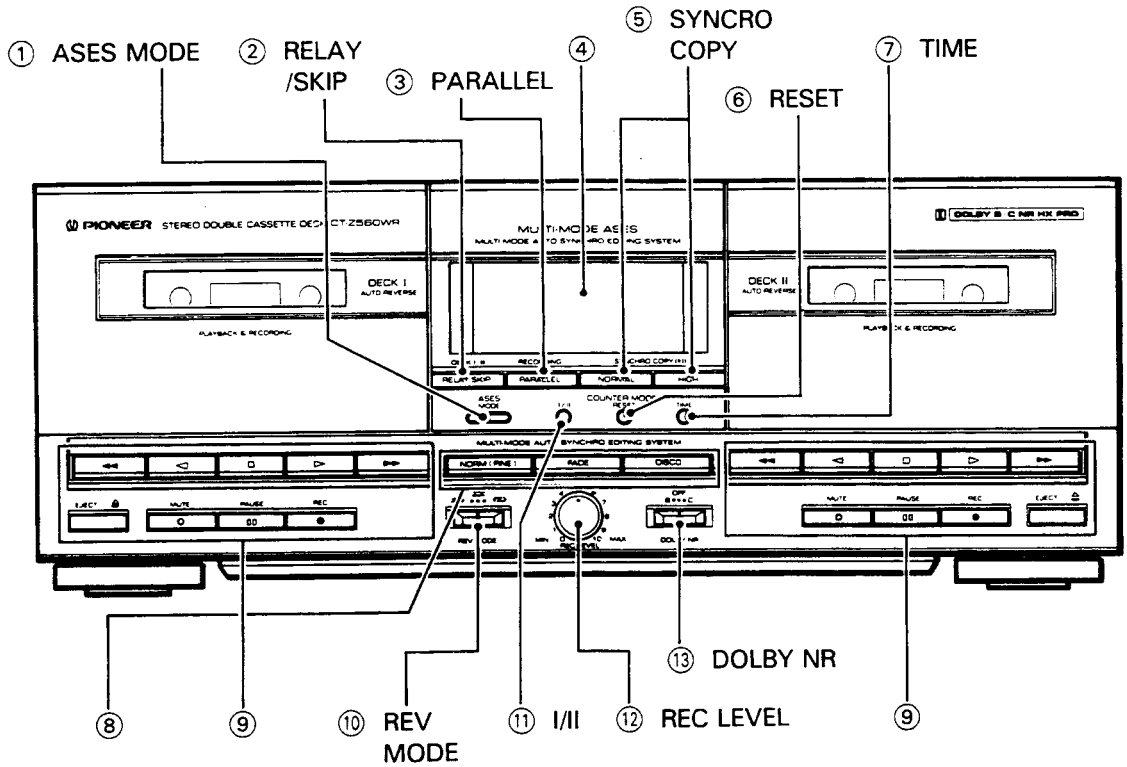
Miscellaneous
Dimensions ..... 360 (W) x 135 (H) x 325 (D) mm
Weight (without package) ..... 4.1 kg

• *Specifications and design subject to possible modification without notice due to improvement.*

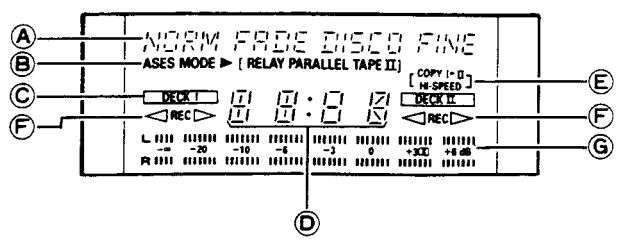
13. PANEL FACILITIES

STEREO DOUBLE CASSETTE DECK CT-Z560WR

Front panel



Display section



① ASES MODE switch

Use this to select A.S.E.S. mode RELAY, PARALLEL, and TAPE II. Display in the display section is possible.

② RELAY/SKIP switch

Use this when you want to perform relay play from deck I to deck II, or from deck II to deck I. During relay play, if there is no sound for more than about 15 seconds, the SKIP function operates to automatically fast forward to the beginning of the next song.

③ PARALLEL switch

Use this when you want to start simultaneous recording from the same source on Deck I and Deck II.

④ Display section

⑤ SYNCHRO COPY (I ► II) switch

Used for tape copying.

NORMAL: Copying from the Deck I tape to the Deck II tape at normal recording/playback speed.

HIGH: Copying at about twice normal tape speed. (Copies can be made in about half the NORMAL time.)

⑥ Counter RESET switch

Press this switch to reset the tape counter display to 0000.

⑦ Counter TIME switch

Use this to switch between tape counter number display and display of elapsed time.

⑧ A.S.E.S. switch

Use this to select the desired type of editing you want A.S.E.S. to perform. The A.S.E.S.(Auto Synchro Editing System) function automatically edits when recording from a CD to a tape.

NORM (FINE): Use this to record directly from a CD.
FADE: This automatically fades out at the end of a tape during recording.
DISCO: This cross-fades between songs during recording.

NOTE:

- *FINE is the NORM mode when performing CD player COMPU PGM EDIT (Computer Allocated Program Editing).*
- *The NORM(FINE) and FADE modes provide a blank space of about five seconds between songs.*

⑨ Operation switch

⏏ EJECT : This ejects the cassette.
▷ (PLAY) : For playing back a tape in the forward mode.
◁ (PLAY) : For playing back a tape in the reverse mode.
►► (FAST) : Fast forward in forward mode, rewind in reverse mode. Music search (MS) starts if this is pressed during playback.
◄◄ (FAST) : Rewind in forward mode, fast forward in reverse mode. Music search (MS) starts if this is pressed during playback.
□ (STOP) : For stopping the tape.
O MUTE : Used for creating a blank space between songs.
▯▯ PAUSE : Temporarily stops tape travel.
● REC : To set to recording standby mode. Recording begins when you press the play switch (◁ or ▷).

⑩ REV(reverse) MODE switch

Use this to select tape travel direction during play and record.

⇉ : One-sided play and record.
⇄ : This enables auto reverse recording and auto reverse play. If you start with the tape running in reverse, only reverse play and recording are possible.
↻ : This enables auto reverse recording and auto repeat play of up to 32 times.
If you start with the tape running in reverse (◁) during recording, recording is only possible in that direction. When the tape ends during reverse play (◁), it counts as one repetition.

⑪ Counter I/II switch

Use this to switch between Deck I and Deck II counter display.

⑫ REC LEVEL control

Use to adjust the recording level. It adjusts the input signal level.

⑬ DOLBY* NR switch

Set this switch to B or C for recording with the built-in Dolby Noise Reduction system and for playback of tapes which have been recorded using the Dolby Noise Reduction system. For other tapes, set the DOLBY NR switch to OFF.

NOTE:
When playing back Dolby NR-encoded tapes, always set this switch to the same position (B-type or C-type) used for recording.

*

- *Dolby noise reduction and HX Pro headroom extension system manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.*
- *"DOLBY", The double-D symbol ▯▯ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.*

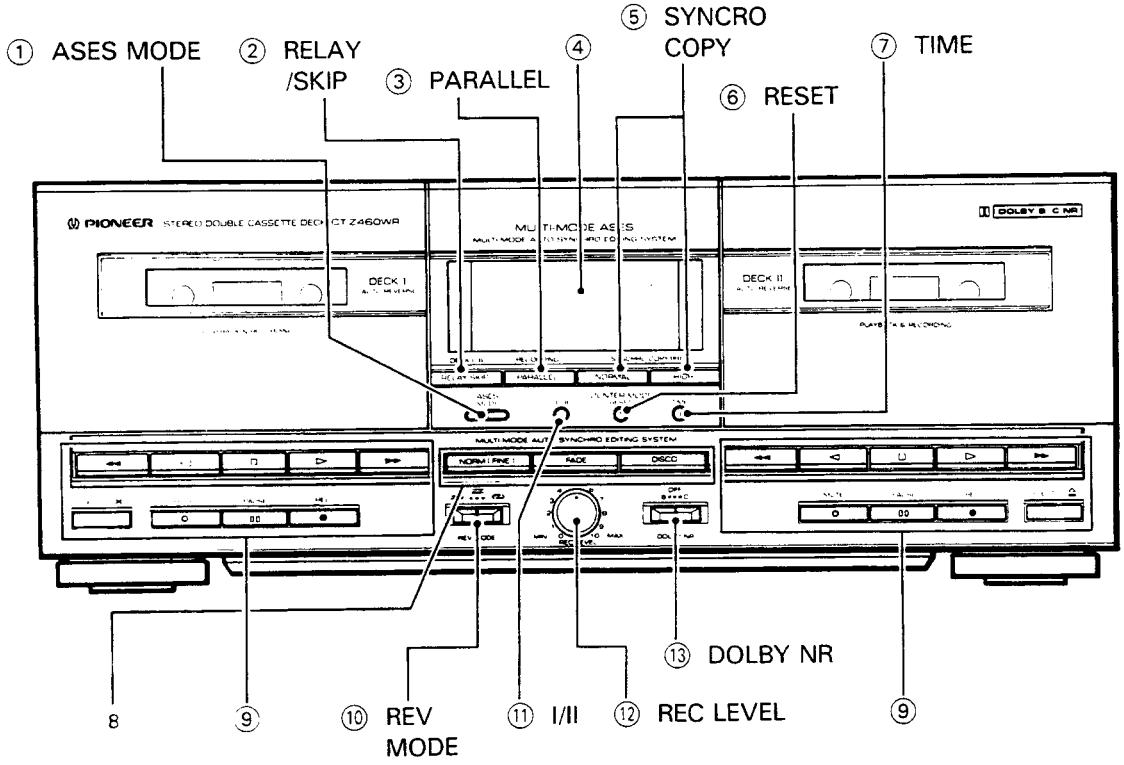
Ⓐ Displays the various A.S.E.S. Options.
Ⓑ Displays the deck's A.S.E.S. mode.
Ⓒ Displays the counter mode (DECK I/DECK II).
Ⓓ Displays the counter or letters.
Ⓔ Lights during tape copy.
Ⓕ Displays tape travel direction.
Ⓖ Level meter.

The ▯▯ mark at the +3dB position displayed on the level meter is the Dolby NR system standard level.

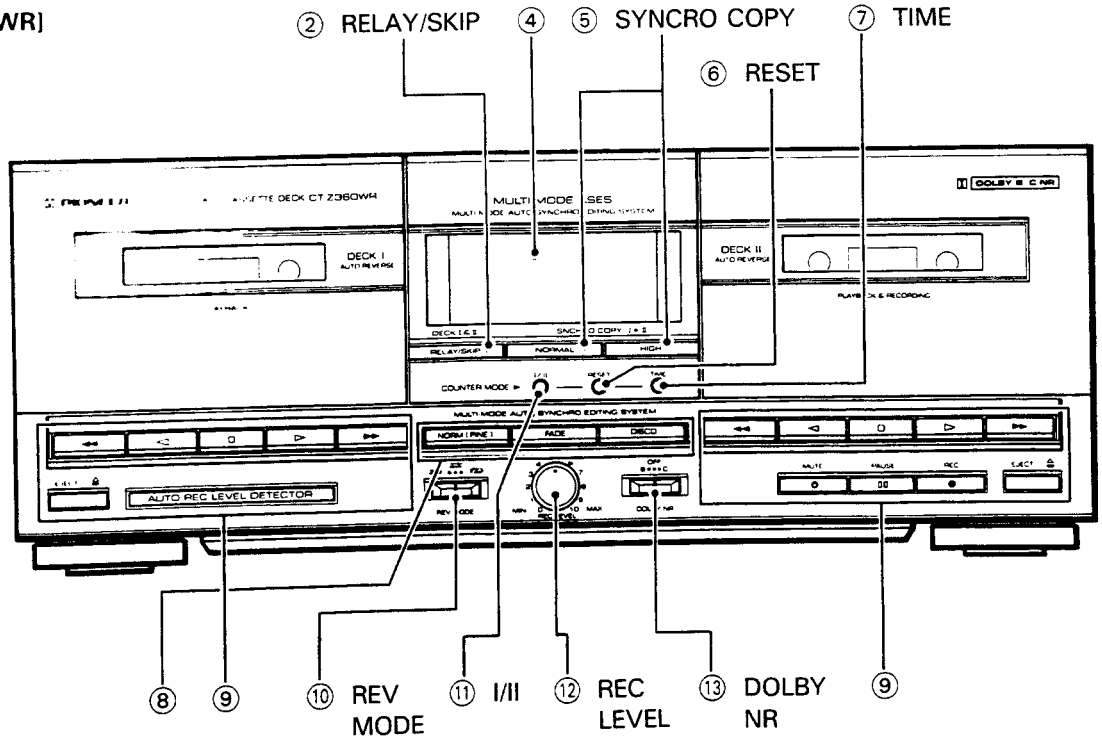
STEREO DOUBLE CASSETTE DECK CT-Z360WR/CT-Z460WR

Front panel

[CT-Z460WR]

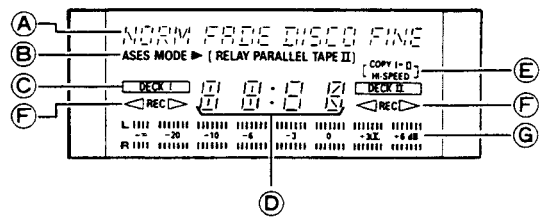


[CT-Z360WR]

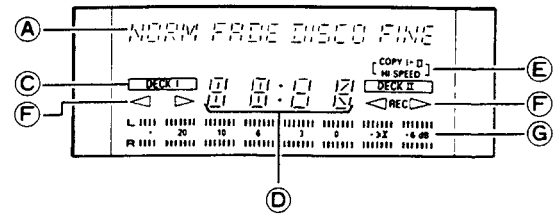


Display section

[CT-Z460WR]



[CT-Z360WR]



① ASES MODE switch (CT-Z460WR only)

Use this to select A.S.E.S. mode RELAY, PARALLEL, and TAPE II. Display in the display section is possible.

② RELAY/SKIP switch

Use this when you want to perform relay play from deck I to deck II, or from deck II to deck I. During relay play, if there is no sound for more than about 15 seconds, the SKIP function operates to automatically fast forward to the beginning of the next song.

③ PARALLEL switch (CT-Z460WR only)

Use this when you want to start simultaneous recording from the same source on Deck I and Deck II.

④ Display section

⑤ SYNCHRO COPY (I ► II) switch

Used for tape copying.

NORMAL: Copying from the Deck I tape to the Deck II tape at normal recording/playback speed.

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NOTE:

- *FINE is the NORM mode when performing CD player COMPU PGM EDIT (Computer Allocated Program Editing).*
- *The NORM(FINE) and FADE modes provide a blank space of about five seconds between songs.*

⑨ Operation switch

- ⏏ EJECT : This ejects the cassette.
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- ◁ (PLAY) : For playing back a tape in the reverse mode.
- ►► (FAST) : Fast forward in forward mode, rewind in reverse mode. Music search (MS) starts if this is pressed during playback.
- ◄◄ (FAST) : Rewind in forward mode, fast forward in reverse mode. Music search (MS) starts if this is pressed during playback.
- □ (STOP) : For stopping the tape.
- O MUTE : Used for creating a blank space between songs.
- ▯▯ PAUSE : Temporarily stops tape travel.
- ● REC : To set to recording standby mode. Recording begins when you press the play switch (◁ or ▷).

On DECK I of the CT-Z360WR, there are no MUTE (O), PAUSE (▯▯), or REC (●) switches.

⑩ REV(reverse) MODE switch

Use this to select tape travel direction during play and record.

- ⥤ : One-sided play and record.
- ⥲ : This enables auto reverse recording and auto reverse play. If you start with the tape running in reverse, only reverse play and recording are possible.
- ⟲ : This enables auto reverse recording and auto repeat play of up to 32 times.
  If you start with the tape running in reverse (◁) during recording, recording is only possible in that direction. When the tape ends during reverse play (◁), it counts as one repetition.

⑪ Counter I/II switch

Use this to switch between Deck I and Deck II counter display.

⑫ REC LEVEL control

Use to adjust the recording level. It adjusts the input signal level.

⑬ DOLBY* NR switch

Set this switch to B or C for recording with the built-in Dolby Noise Reduction system and for playback of tapes which have been recorded using the Dolby Noise Reduction system. For other tapes, set the DOLBY NR switch to OFF.

NOTE:

When playing back Dolby NR-encoded tapes, always set this switch to the same position (B-type or C-type) used for recording.

*

- *Dolby noise reduction manufactured under license from Dolby Laboratories licensing Corporation.*
- *"DOLBY" and the double-D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.*

Ⓐ Displays the various A.S.E.S. Options.
Ⓑ Displays the deck's A.S.E.S. mode (CT-Z460WR only).
Ⓒ Displays the counter mode (DECK I/DECK II).
Ⓓ Displays the counter or letters.
Ⓔ Lights during tape copy.
Ⓕ Displays tape travel direction.
Ⓖ Level meter.

The ▯▯ mark at the +3dB position displayed on the level meter is the Dolby NR system standard level.

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